ORDER NO.DSD0403003C1

B24

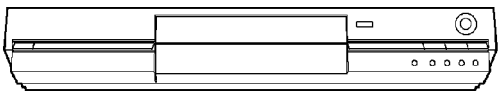
Service Manual

DVD Video Recorder

DMR-E85HP / DMR-E85HPC

Colour

(S).....Silver Type



Notes: The part of DVD Drive (VXY1814) is listed separately.
Please refer ORDER No. RAM0402001C0

When replacing with Digital P.C.B. or HDD, "UNFORMAT" indication is displayed and HDD must be formatted.
After that, programme in the HDD will be lost.
In detail, please refer to each content in this service manual.

SPECIFICATIONS

Specifications

Power supply	AC120 V, 60 Hz
Power consumption	35 W
Power consumption in standby mode	approx. 14 W
Recording system	DVD Video Recording format (DVD-RAM), DVD Video format (DVD-R)
Optical pick-up	System with 1 lens, 2 integration units (658 nm wavelength for DVDs, 795 nm wavelength for CDs)
Recordable discs	・DVD-RAM: 12cm 4.7GB, 12cm 9.4GB, 8cm 2.8GB, 12cm 4.7GB (Ver. 2.1 /3X-SPEED DVD-RAM Revision 1.0) ・DVD-R: 12cm 4.7GB, 8cm 1.4GB (for General Ver. 2.0), 12cm 4.7GB (for General Ver. 2.0 /4X-SPEED DVD-R Revision 1.0)
Recording time	・Maximum 8 hours (with 4.7 GB disc) XP: Approx. 1 hours SP: Approx. 2 hours LP: Approx. 4 hours EP: Approx. 6 hours or 8 hours ・Maximum 213 hours (with built in 120GB HDD) XP: Approx. 26 hours SP: Approx. 52 hours LP: Approx. 104 hours EP: Approx. 160 hours or 213 hours
Region number	Region No.1
Playable discs	・DVD-RAM: 12cm 4.7GB, 12cm 9.4GB, 8cm 2.8GB, 12cm 4.7GB (Ver. 2.1 /3X-SPEED DVD-RAM Revision 1.0) ・DVD-R: 12cm 4.7GB, 8cm 1.4GB (for General Ver. 2.0), 12cm 4.7GB (for General Ver. 2.0 /4X-SPEED DVD-R Revision 1.0) ・DVD-VIDEO, DVD-Audio, CD-Audio (CD-DA), Video CD, CD-R/ CD-RW (MP3, CD-DA, Video CD formatted discs)
Built-in HDD Capacity	120GB
Drive Unit	High Speed Drive (correspond to 4times speed with DVD-R disc and 3times speed with DVD-RAM disc)
Video system	
Television system	NTSC color signal, 525 lines, 60 fields
Recording system	MPEG2 (Hybrid VBR)

Input	・LINE (pin jack x3), 1.0 Vp-p; 75 Ω ・S connector x3 Y: 1.0 Vp-p; 75 Ω C: 0.286 Vp-p; 75 Ω
Output	・LINE (pin jack x2), 1.0 Vp-p; 75 Ω ・S connector x2 Y: 1.0 Vp-p; 75 Ω C: 0.286 Vp-p; 75Ω
Component video output (480P/480i)	Y: 1.0 Vp-p; 75 Ω PB: 0.7 Vp-p; 75 Ω PR: 0.7 Vp-p; 75 Ω
Antenna reception input	TV Channel: 2ch-69ch, 75 Ω CATV Channel: 1ch-125ch, 75 Ω
Audio system	
Recording system	Dolby Digital 2ch, Linear PCM (XP mode, 2ch)
Input	LINE (pin jack) x3 Reference input: 309 mVrms FS: 2 Vrms (1 kHz, 0 dB) Input impedance: 47 kΩ
Output	LINE (pin jack) x2 Reference output: 309 mVrms FS: 2 Vrms (1 kHz, 0 dB) Output impedance: 1 kΩ (Load impedance: 10 kΩ)
Digital Audio Out	Optical terminal (PCM, Dolby Digtal, DTS)
Channel Number	2ch (L/R)
Others	
Dimensions	Approx. 430 (W) x 79 (H) x 274 (D) mm [Approx. 16 15/16 ″ (W) x 3 1/8 ″ (H) x 10 13/16″ (D)]
Weight	Approx. 4.2 kg (9.24 lbs)
Operating Temperature	5 ℃-40℃ (41 F-104 F)
Operating Humidity range	10 %-80 % RH (no condensation)
Clock unit	Quartz-controlled 12-hour digital display
LASER Specification (Class I LASER Product)	
Wave Length	795 nm, 658 nm
Laser Power	No hazardous radiation is emitted with the safety protection.
Solder	This model uses lead free solder (PbF)

Notes : Mass and dimensions are approximate.
Specifications are subject to change without notice.

Panasonic

1. Safety precautions

1.1. General guidelines

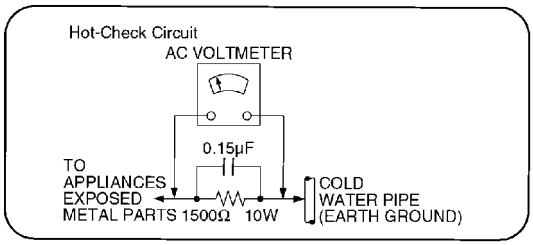
1. **When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.**
2. **After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.**

3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. Leakage current cold check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to thechassis, the reading should be between 1M Ω and 5.2M Ω . / When the exposed metal does not have a return path to the chassis, the reading must be ∞.

Figure 1



1.1.2. Leakage current hot check / (See Figure 1 .)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5k Ω , 10 watts resistor, in parallel with a 0.15 μ F capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1 .
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2

milliampere. In case a measurement isoutside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

1.2. Caution for fuse replacement

(For English)
CAUTION:
Replace with the same type fuse:
(Manufacturer: SOC or Hollyland, Type: ET or 50T, 1.6A, 250V)

(For Canadian French)
ATTENTION:
Utiliser un fusible de rechange de même type:
(Fabricant: SOC ou Hollyland, Type: ET ou 50T, 1.6A, 250V)

2. Prevention of Electrostatic Discharge (ESD) to Electrostatic Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatic Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistor-sandsemiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective**

package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparableconductive material).

7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.**

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. **Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficientto damage an ES device).**

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

3. Precaution of Laser Diode

CAUTION:

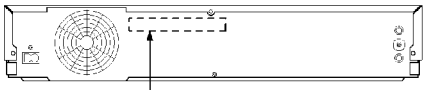
This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.
Wave length: 795 nm/658 nm
Maximum output radiation power from pickup: 100 μ W/VDE
Laser radiation from the pickup lens is safety level,but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

ACHTUNG:

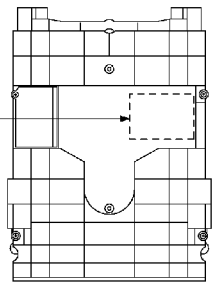
Dieses Produkt enthält eine Laserdiode.
Im eingeschalteten Zustand wird unsichtbare Leserstrahlung von der Laserinheit adgestrahit.
Wellenlänge: 795 nm/658 nm
Maximale Strahlungsleistung der Lasereinheit: 100 μ W/VDE
Die Strahlungan der Lasereinheit ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlines blicken.
4. Nicht über längere Zeit in die Fokussierlines blicken.



Product complies with DHHS Rules 21 CFR Subchapter J in effect at date of manufacture.
Matsushita Electric Industrial Co., Ltd.
Kadoma, Osaka, Japan

DANGER – VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM. (FDA 21 CFR)
CAUTION – VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. (IEC60825-1)
ATTENTION – RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
ADVARSEL – SYNLIG OG USYNLIG LASERSTRALING VED ÅBNING. UNGÅ UDSÆTTELSE FOR STRÅLING.
VARO! – AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING – SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.
ADVARSEL – SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT – SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEN STRAHL AUSSETZEN.
注意 – 打开时有可见及不可见激光辐射。避免激光束照射。
注意 – ここを開くと可視及び不可視のレーザー放射があります。ビームに直接当たり、曝されないようにしてください。
RQLS0233



CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

4. How to replace the Lithium Battery

REPLACEMENT PROCEDURE

1. Remove the Top case and DVD-RAM drive unit with Main P.C.B. by referring the Disassembling Procedure.

2. Unsolder the Lithium Batteries: B7501 and then replace it into new one.
(As shown in 20.2.1. The Main P.C.B.)

NOTE:

The lithium battery is a critical component. (Type No.: CR2354-1GUF Manufactured by Panasonic.)
It must never be subjected to excessive heat or discharge.
It must therefore only be fitted in equipment designed specifically for its use.
Replacement batteries must be of the same type and manufacture.
They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.
Do not attempt to re-charge the old battery or re-use it for any other purpose.
It should be disposed of in waste products destined for burial rather than incineration.

(For English)

CAUTION
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

(For French)

PRECAUTION
Le fait de remplacer incorrectement la pile peut présenter des risques d'explosion. Remplacer la pile uniquement par une pile identique ou de type équivalent recommandée par le fabricant. Se débarrasser des piles usagées conformément aux instructions du fabricant.

5. Handling the Lead-free Solder

5.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:
P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control,please set it to 700 ± 20°F (370 ± 10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).
- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

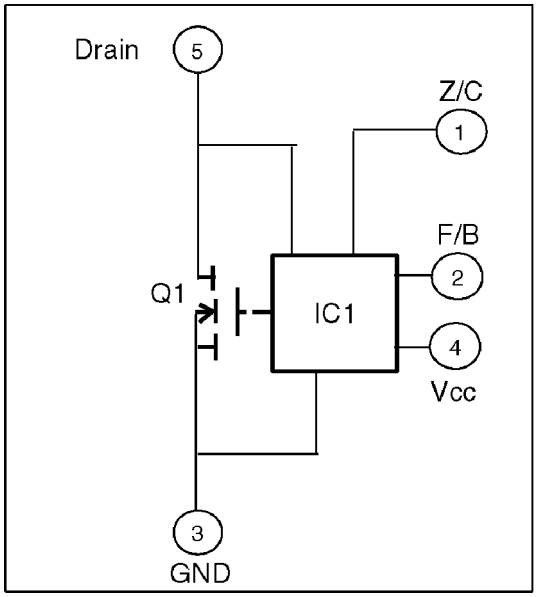
6. Each Buttons

7. New Features

7.1. Function of Power Circuit (IC1150)

1. General
We adopted IC module as the Switching Power Circuit for lower power consumption.
IC1150 is constructed with Switching materials and Control IC, and is partial resonance module.
We realized Switching Power with high efficiency, low noise and low power consumption.

2. Equivalence Circuit to IC1150

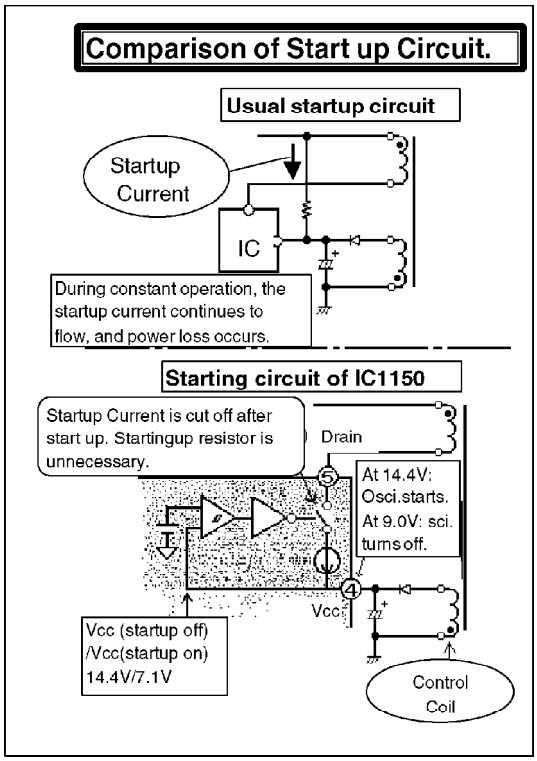


Pin No.	Symbol	Description
1	Z/C	Trigger input terminal. Zero detection voltage: 0.25V It becomes less than 3V, the mode turns to standby.
2	F/B	Bias current feedback input terminal. ● Switching ON time (min.) ~ (max.) 1.5V ~ 4.5V / 0 μ sec. ~ 25 μ sec. ● In standby mode Oscillation stops:less than 0.8V Oscillation starts: over 1.8V
3	GND	GND terminal
4	Vcc	Power terminal of IC. Oscillation starting voltage: Vcc = and over 14.5V Oscillation stop voltage: Vcc = and less than 9.6V Over voltage latching voltage: Vcc = 20V
5	Drain	Drain terminal for Main switching material.

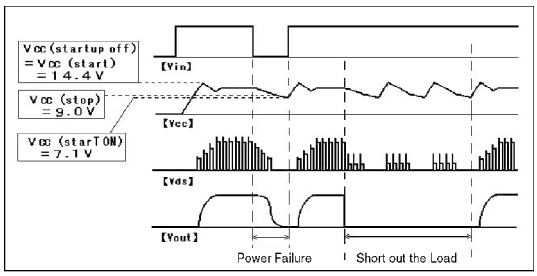
3. Startup Circuit

When power is turned on, input voltage of the Switching Transformer is supplied to IC1150 as the startup power.

After IC1150 has started, the startup current is cut off.
The current of Startup Circuit is supplied as constant current source in IC1150 and as charge current for the capacitor connected between Vcc terminal and GND out side of IC1150 until Vcc reaches 14.4V.
When Vcc reaches 14.4V, the Startup Circuit is cut off, then oscillation starts.
After then, power of IC1150 is supplied from control coil.
In case, the power failure or short out of the load, when Vcc becomes 9.0V; the oscillation stops, furthermore Vcc becomes 7.1V the Startup Circuit starts up and Vcc starts to rise.


Comparison of Start up Circuit.
Usual startup circuit
Startup Current
IC
During constant operation, the startup current continues to flow, and power loss occurs.
Starting circuit of IC1150
Startup Current is cut off after start up. Startingup resistor is unnecessary.
Drain
At 14.4V: Osci.starts. At 9.0V: sci. turns off.
Vcc
Vcc (startup off) /Vcc(startup on) 14.4V/7.1V
Control Coil

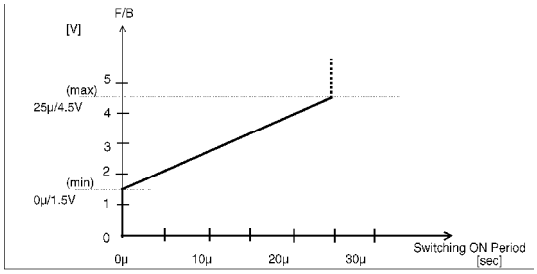
Startup Circuit Timing Chart



Function of Z/C Terminal
When voltage of Z/C reaches 0.25V, Gate signal is output and Drain current starts to flow.

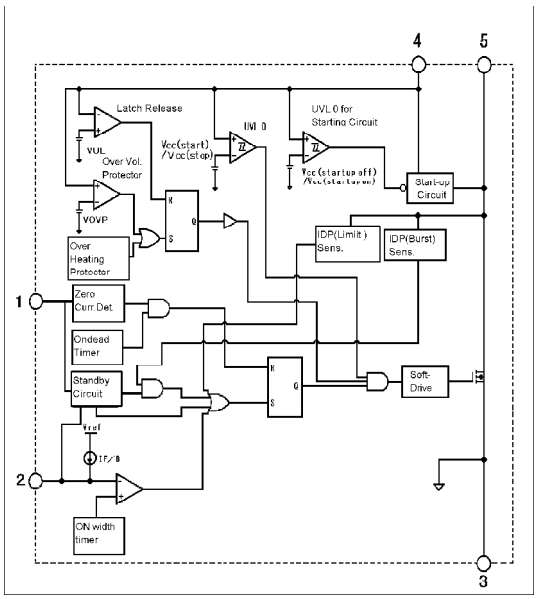
Function of F/B terminal
F/B signal decides Switching ON width in low voltage controlling.

The Switching ON width responds to change of F/B Voltage.



Standby Function
When Z/C Voltage becomes less than 3V, the unit changes to Standby mode.

IC1150 Block Diagram



Signal name

Pin No.	Name	Symbol
1	Zero Current Det.	Z/C
2	Feed back	F/B
3	GND	GND
4	Vcc	Vcc
5	Drain	Drain

8. Taking out the Disc from RAM-Drive Unit when the

Disc cannot be ejected by OPEN/CLOSE button

8.1. Forcible Disc Eject

8.1.1. When the power can be turned off.

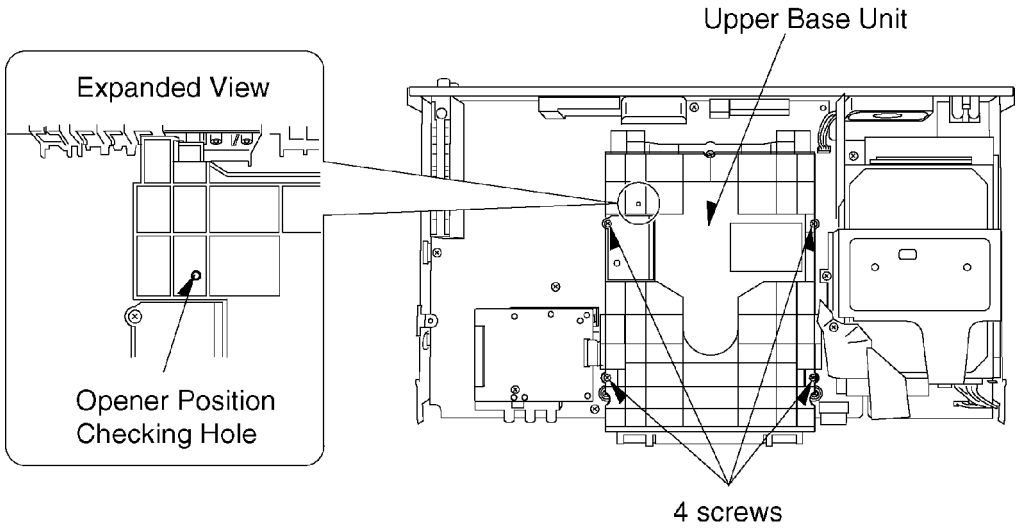
1. Turn off the power and press [STOP] [CH UP] keys on the front panel simultaneously for 5 seconds.

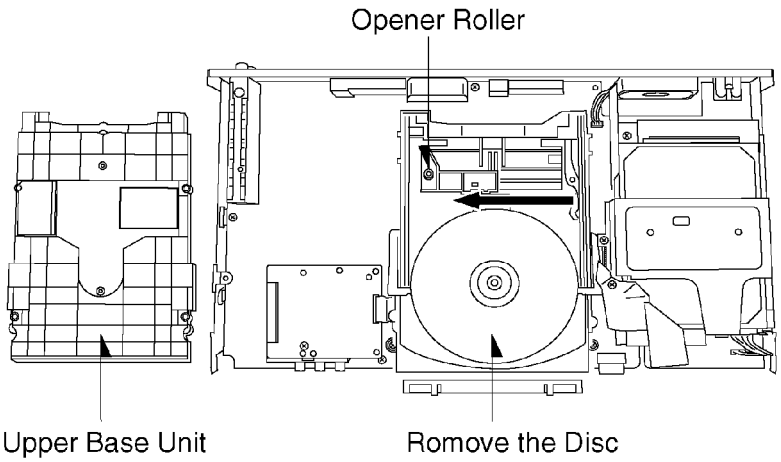
8.1.2. When the power can not be turned off.

1. Press [POWER] key on the front panel for over 10 seconds to turn off the power forcibly, and press [STOP] [CH UP] keys on the front panel simultaneously for 5 seconds.

8.2. When the Forcible Disc Eject can not be done.

1. Turn off the power and pull out AC cord.
2. Remove the Top Case.
3. Remove the Front Panel.
4. Remove 4 screws and Upper Base Unit from DVD-RAM Drive.
5. Take out the disc and put the Opener Roller on fully position for direction of Arrow.
6. Put the Upper Base Unit so that the Opener Roller is inserted into the groove.
7. Check center of Opener Roller is seen through the Opener position Checking Hole, and tighten 4 screws.





9. Service Explorer

Confirm "RAM-Drive Last Error" in Service Mode

Execute Service Mode

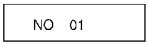
1. Press [STOP], [TIME SLIP] and [OPEN/CLOSE] simultaneously for 5 seconds when P-off.
FL Display:

SERVICE MODE

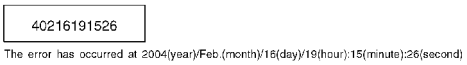
***After finishing display "(7). Factor of Drive Error occurring", press [0] [2] ~[9] [9] keys of the Remote Controller so that 99 memories can be displayed as maximum.**

2. Press [4] [2] keys of remote controller.

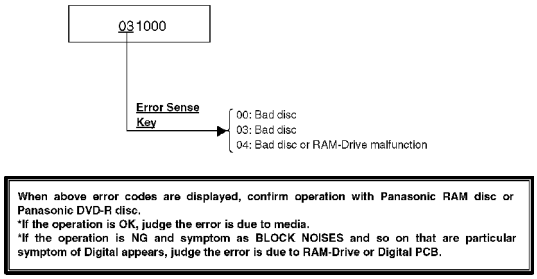
Example of FL Display:
(1) Error Number is displayed for 5 seconds.



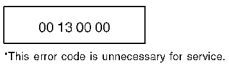
(2) Time when the error has occurred is displayed for 5 seconds.



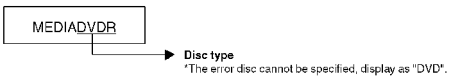
(3) Last Drive Error (1/2) is displayed for 5 seconds.


03 1000
Error Sense Key
00: Bad disc
03: Bad disc
04: Bad disc or RAM-Drive malfunction
When above error codes are displayed, confirm operation with Panasonic RAM disc or Panasonic DVD-R disc.
*If the operation is OK, judge the error is due to media.
*If the operation is NG and symptom as BLOCK NOISES and so on that are particular symptom of Digital appears, judge the error is due to RAM-Drive or Digital PCB.

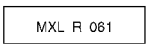
(4) Last Drive Error (2/2) is displayed for 5 seconds.



(5) Error occurring Disc type is displayed for 5 seconds.



(6) Disc Maker's ID is displayed for 5 seconds.



Example of Disc Maker's ID:
DVD-R Disc

No.	FL Display (Disc Maker's ID)	Disc Maker	Country
1	MEI	Panasonic	Japan
2	PVC	Pioneer	Japan
3	MCC	Mitsubishi Chemical Corporation	Japan
4	TDK	TDK	Japan
5	MXL	Maxell	Japan
6	MCI	MITUI CHEMICALS	Japan
7	JVC	Victor JVC	Japan
8	TAIYOYUDEN	Taiyo yuden	Japan
	TYG		
9	GSC	Giga Storage	Taiwan
10	PRODISC	Prodisc	Taiwan
11	PRINCO	PRINCO	Taiwan
12	RITEK	RITEK	Taiwan
13	OPTDISC	OPTDISC	Taiwan
14	LEAD DATA	LEAD DATA	Taiwan
15	CMC	CMC	Taiwan
16	AUVISTAR	AUVISTAR	Taiwan
17	ACER	Acer	Taiwan

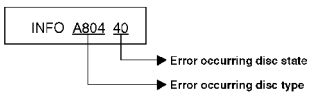
No.	FL Display (Disc Maker's ID)	Disc Maker	Country
18	VIVASTAR	VIVASTAR	Switzerland
19	LGE	LG Electronics	Korea

DVD-RAM Disc

No.	FL Display (Disc Maker's ID)	Disc Maker	Country
1	MEI	Panasonic	
2	MATSUSHITA	Panasonic	Japan
3	MXL	Maxell	Japan
4	PRODISC	Prodisc	Taiwan
5	OPTDISC	OPTDISC	Taiwan
6	CMC	CMC	Taiwan

***Since an display is arbitrarily set up by the disk producer side, the above-mentioned display may be changed.**
Please make it reference as an example of a display.

(7) Factor of Drive Error occurring is left displayed



Error Occurring Disc Type

FL Display	Disc Type
00	DVD-ROM/Video
01	Audio-CD
02	2.6GB DVD-RAM
03	4.7GB DVD-RAM
04	DVD-R

Error Occurring Disc State

FL Displays (Hexadecimal)	Description			
	Disc distinction state	Cartridge disc state	Cartridge disc state	Disc size
00	OK	With cartridge	Has not been opened yet.	12 cm
10	OK	With cartridge	Has not been opened yet.	8 cm
20	OK	With cartridge	Has been opened.	12 cm
30	OK	With cartridge	Has been opened.	8 cm
40	OK	Bare	Has not been opened yet.	12 cm
50	OK	Bare	Has not been opened yet.	8 cm
60	OK	Bare	Has been opened.	12 cm
70	OK	Bare	Has been opened.	8 cm
80	NG	With cartridge	Has not been opened yet.	12 cm
90	NG	With cartridge	Has not been opened yet.	8 cm
A0	NG	With cartridge	Has been opened.	12 cm
B0	NG	With cartridge	Has been opened.	8 cm
C0	NG	Bare	Has not been opened yet.	12 cm
D0	NG	Bare	Has not been opened yet.	8 cm
E0	NG	Bare	Has been opened.	12 cm
F0	NG	Bare	Has been opened.	8 cm

10. Self-Diagnosis and Special Mode Setting

10.1. Self-Diagnosis Functions

Self-Diagnosis Function provides information for errors to service personnel by “Self-Diagnosis Display” when any error has occurred.
U14, H and F** are stored in memory and held.**
Display on FL will be cancelled when the power is turned off or AC input is turned off during self-diagnosis display is ON.

Error Code	Diagnosis contents	Description	Monitor Display	FL display
U12	Remote control code error	Display appears when main unit and remote controller codes are not matched.	No display	*CHK REMOTE “*” is remote controller code of the main unit. Display for 5 seconds.
U14	Abnormal inner temperature detected	Display appears when the drive temperature exceeds 70°C. The power is turned off forcibly. For 30 minutes after this, all key entries are disabled. (Fan motor operates at the highest speedfor the first 5 minutes. For the remaining 25 minutes, fan motor is also stopped.) The event is saved in memory as well.	No display	U14 “U14” is displayed for 30 minutes.

Error Code	Diagnosis contents	Description	Monitor Display	FL display
U99	**Hang-up**	**Displayed when communication error has occurred between Main microprocessor and Timer microprocessor.**	**No display**	U99 **Displayed is left until the [POWER] key is pressed.**
H01	**Inoperative fan motor**	**Display appears when inoperative fan motor is detected after powered on.** **The power is turned off when detecting.**	**No display**	H01 **Displayed is left.**
F00	**No error information**	**Initial setting for error code in memory** **(Error code Initialization is possible with error code initialization and main unit initialization.)**	**No display**	F00 **Displayed is left.**
F01	**Drive hardware error**	**Display appears when drive unit error is detected. The event is saved in memory.**	**No display**	F01 **Displayed is left.**
F12	**Initialization error when main microprocessor is started up for program recording**	**Display appears when initialization error is detected after starting up main microprocessor for program recording. The event is saved in memory.** **The power is turned off when detecting.**	**No display**	F12 **Displayed is left.**

Error Code	Diagnosis contents	Description	Monitor Display	FL display
UNSUPPORT	Unsupported disc error	*An unsupported format disc was played, although the drive starts normally. *The data format is not supported, although the media type is supported. *Exceptionally incase of the disc is dirty.	"This disc is incompatible."	UNSUPPORT Display for 5 seconds.
NO READ	Disc read error	*A disc is flawed or dirty. *A poor quality failed to start. *The track information could not be read.	"Cannot read. Please check the disc."	NOREAD
HARD ERR	Drive error	The drive detected a hard error.	"DVD drive error."	Display for 5 seconds. HARD ERR
SELF CHECK	Restoration operation	Since the power cord fell out during a power failure or operation, it is under restoration operation. *It will OK, if a display disappears automatically. If a display does not disappear, thereis the possibility that defective Digital P.C.B. / RAM drive.	No display	SELF CHECK
Full Program	32 programs are already set.	32 programs are already set.	No display	PROG FULL

Error Code	Diagnosis contents	Description	Monitor Display	FL display
HDD SLEEP	In order to extend HDD life, the HDD is in SLEEP (not activated) mode.	If there is no disc in the unit, the HDD will go into SLEEP mode after there has been no operation for 30 minutes or longer. *While in SLEEP mode play or recording may not begin rightaway because the HDD takes time to be re-activated.		HDD SLP

10.2. Special Modes Setting

Item		FL display	Key operation
Mode name	Description		Front Key
TEST Mode	*All the main unit's parameters (include tuner) are initialized.	TEST L1	Press [SKIP (REV)], [TIME SLIP] and [OPEN/CLOSE] keys simultaneously for five seconds when power is off.
Service Mode	Setting every kind of modes for servicing. *Details are described in “10.3. Service Mode ”.	SERVICE MODE	When the power is off, press [STOP], [TIME SLIP] and [OPEN/CLOSE] keys simultaneously for 5 seconds.
Rating password	The audiovisual level setting password is initialized to “Level 8”.	INIT	Open the tray, and press [SKIP (REV)] and [SKIP (FWD)] simultaneously for five seconds.

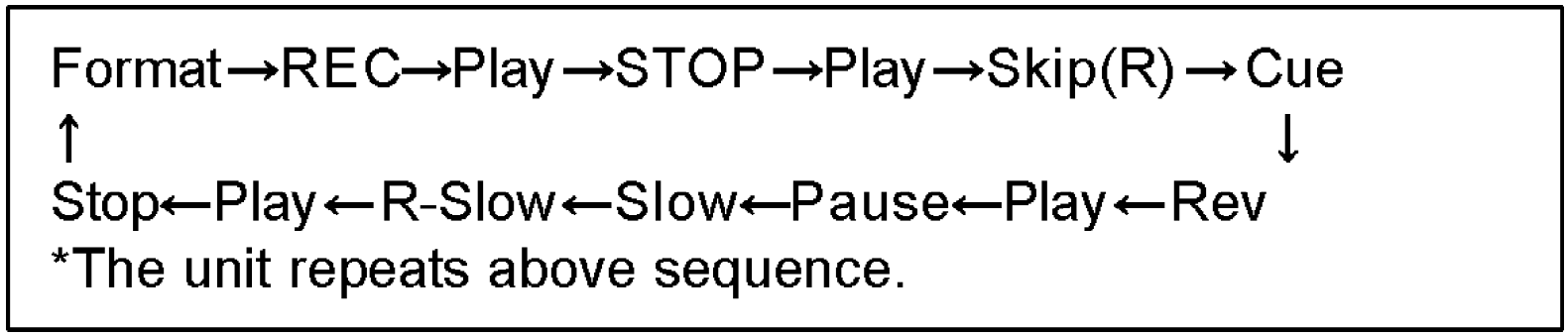
Item		FL display	Key operation
Mode name	Description		Front Key
Forced disc eject	Removing a disc that cannot be ejected. The tray will open and unit will shift to P-off mode. *When Timer REC is ON or EXT-LINK is ON, execute " Forced disc eject " after releasing TimerREC or EXT-LINK. *This command is not effective during "Child lock" is ON.	The display before execution leaves. **********	When the power is off, press [STOP] and [CH UP] keys simultaneously for five seconds.
Forced power-off	When the power button is not effective while power is ON, turn off the power forcibly.*When Timer REC is ON or EXT-LINK is ON, execute “Forced Power-off” after releasing Timer RECor EXT-LINK. Action: The tray will open, and the power will turn off.	Display in P-off mode.	Press [Power] key over than 10 seconds.

Item		FL display	Key operation
Mode name	Description		Front Key
Aging	Perform sequence of modes as * Aging Description shown below continually.	Display following the then mode.	When the power is ON, press [CH DOWN], TIME SLIP] and [OPEN / CLOSE] simultaneously for over five seconds and less than 10 seconds. *The [REC MODE] should be set to EP or LP. *Whenthe unit has hung-up because of pressing keys for over 10 seconds, once turn off the power, and re-execute this command. “When releasing Aging mode, press [POWER] key.

Item		FL display	Key operation
Mode name	**Description**		**Front Key**
Demonstration lock/unlock	**Ejection of the disc is prohibited. The lock setting is effective until unlocking the tray and not released by “Main unit initialization” of service mode.**	***When lock the tray.** LOCK **“LOCK” is displayed for 3 seconds.**	**When the power is on, press [STOP] and [POWER] keys simultaneously for five seconds.**
		***When unlock the tray.** UNLOCK **“UNLOCK” is displayed for 3 seconds.**	**When the power is on, press [STOP] and [POWER] keys simultaneously for five seconds.**
		***When press OPEN/ CLOSE key while the tray being locked.** LOCK **Display “LOCK” for 3 seconds.**	**Press [OPEN/CLOSE] key while the tray being locked.**
ATP Initialization	**ATP setting is initialized, and the unit turns off automatically.**	**It is same with display in stop mode.** **********	**When the power is on (E-E mode), press [CH UP] and [CH DOWN] simultaneously for five seconds.**

Item		FL display	Key operation
Mode name	Description		Front Key
Progressive initialization	The progressive setting is initialized to Interlace.	The display before execution leaves. **********	When the power is on (E-E mode), press [STOP] and [TIME SLIP] simultaneously for five seconds.

Aging Contents (Example):



10.3. Service Modes

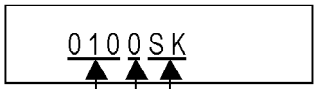
Service mode setting: While the power is off, press TIME SLIP, STOP and OPEN / CLOSE simultaneously for five seconds.

Item		FL display	Key operation
Mode name	**Description**		**(Remote controller key)**
Release Items	**Item of Service Mode executing is cancelled.**	SERVICE MODE	**Press [0] [0] or [Return] in service mode.**
Error Code Display	**Last Error Code of U14/H/F held by Timer is displayed on FL. *Details are described in "10.1. Self-Diagnosis Functions".**	♣□□ *♣ shows U/H/F. □□ shows number.	**Press [0] [1] in service mode**
ROM Version Display	**Region code, MAIN firm version, TIMER firm version and DRIVE firmware versions are displayed on FL for five seconds per each version in order, but ROM version will be left displayed.**	REGION* MAIN ****** TIMER****** DRIVE **** ROM * *** **"□ "□ are version displays.**	**Press [0] [2] in service mode**

Item		FL display	Key operation
Mode name	Description		(Remote controller key)

Version Display of Main Microprocessor

Example of FL Display



Version

OEM Code

0: Matsushita Electric
1: Hitachi
2: Samsung
3: DENON

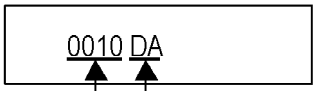
Destination Code and Model Code

For Japan	For North America/Canada /Latin America
SK: DMR-E55	DK: DMR-E55P/PC/PL/PX
SL: DMR-E85H	DP: DMR-E65P
SR: DMR-E95H	DL: DMR-E85HP/HPC
SS: DMR-E300H	DR: DMR-E95HP
SU: DMR-E500H	DU: DMR-E500HP/HPC
SQ: DMR-E75V	DQ DMR-E75VP/VPC/VPL
SV: DMR-E150V	

For Europe/Asia/
EK: DMR-E55EG/EB/EBL/EP/EE/GCS/GN/GK/GC, DMR-E53EG
EP: DMR-E65EG/EB/EP/EE/GCS/GN/GK/GC
EL: DMR-E85HEG/HEB/HEP/HEE/HGCS/HGN
ER: DMR-E95HEG/HEB
EU: DMR-E500HEG/HEB/HGCS/HGN/HGK
EQ: DMR-E75VEG/VEB

Version Display of Timer Microprocessor

Example of FL Display



Version: 0.01

Bottom 2 figures of Part Number of Timer Microprocessor: M306H3RDA

Item		FL display	Key operation
Mode name	**Description**		**(Remote controller key)**
White Picture Output	**White picture is output as component Output from AV Decoder.** ***White picture** **(Saturation rate : 100%)** ***It is enable to switch Interlace/ Progressive by "I/Pswitch: [1] [4]"**	***Initial mode is "Interlace".** WHIT I	**Press [1] [1] in service mode.**
		Switch Interlace/ Progressive WHIT P	**Press [1] [4] in White Picture Output mode.** ***I/P are switched alternately.**
Magenta Picture Output	**Magenta picture is output with Component Output from AV Decoder.** ***Magenta picture** **(Saturation rate: 100%)** ***It is enable to switch Interlace/ Progressive by "I/Pswitch: [1] [4]"**	***Initial mode is "Interlace".** MAGE I	**Press [1] [2] in service mode.**
		Switch Interlace/ Progressive MAGE P	**Press [1] [4] in Magenta Picture Output mode.** ***I/P are switched alternately.**

Item		FL display	Key operation
Mode name	**Description**		**(Remote controller key)**
RTSC Return in XP (A & V)	**L1 input signal is encoded (XP), decoded (XP) and output decoded signal to external without DISC recording and DISC playback.**	**Initial mode: EE2/ Interlace / XP/ Audio 48kHz** EE2 I XP 48	**Press [1] [3] in service mode.**
		Switch Interlace/ Progressive EE2 P XP 48	**Press [1] [4] in RTSC Return XP mode.** ***I/P are switched alternately.**
		Audio 44.1 kHz/ 48 kHz Switch EE2 P XP 44	**Press [2] [4] in RTSC Return XP mode.** ***48 kHz / 44.1 kHz are switched alternately.**
I/P Switch	**Switch Interlace and Progressive in EE mode.** ***Initial setting is "Interlace".** ***This command is effective during executing "White Picture Output", "MagentaPicture Output" and "RTSC Return in XP (A & V)" modes.**	**Initial mode is Interlace** SERVICE I **Switch Interlace/ Progressive** SERVICE P	**Press [1] [4] in I/P Switch mode.** ***I/P are switched alternately.**
Audio Mute (XTMUTE)	**Check whether mute is applied normally by the timer microprocessor.**	TIMER MUTE	**Press [2] [1] in service mode.**

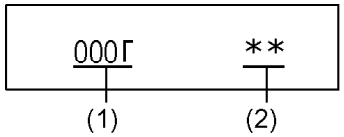
Item		FL display	Key operation
Mode name	Description		(Remote controller key)
Audio Mute (XDMUTE)	Check whether mute is applied normally by the Digital P.C.B. (GLUE IC).	MAIN MUTE	Press [2] [2] in service mode.
Audio Pattern Output	The audio pattern stored in the internal memory is output (Lch: 1kHz/-18dB) (Rch: 400Hz/-18dB) *Audio sound clock switching operation of DAC can beconfirmed by sub command [2] [4].	Initial mode (Audio 48kHz) AUDIO 48	Press [2] [3] in service mode.
		Audio 44.1kHz/48kHz switching AUDIO 44	Press [2] [4] in Audio Pattern Output mode. *48 kHz / 44.1 kHz are switched alternately.

Item		FL display	Key operation
Mode name	**Description**		**(Remote controller key)**
HDD READ inspection	**Perform a complete read inspection of the HDD.**	**When the HDD is OK** HDD RDOK **If the HDD is defective** HDD RDNG□○○ **□ : Judge of Forward rate.** *When normal (Forward rate is 35Mbps or more, and there is no HDD error): _ is Space. *When Abnormal (Forward rate is less than 35Mbps): _ is X. ○○ **: Number of what have spent time for seeking over 100ms.** *When normal: ○○ are spaces. *When Abnormal: Display Number of what have spent time for seeking over 100ms. However, if the number is more than 100, Display [XX]. We judge it is normal that the number is less than 4.	**Press [3] [1] in the service mode.** ***When canceling the checking mode while executing, do "forced power-off".** **Method:** **Press the "POWER" button on the Front Panel more than 10 seconds.**

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
Laser Used Time Indiction	Check laser used time (hours) of drive.	LASER***** ● (*****) is the used time display in hour. ● Laser used time ofDVD/ CD in Playback/ Recording mode is counted.	Press [4] [1] in service mode.
Delete the Laser Used Time	Laser used time stored in the memory of the unit is deleted.	CLR LASER	Press [9] [5] in service mode.

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
RAM Drive Last Error	RAM Drive error code display. *For details about the drive error code, refer to the Service Manual for the specific RAM Drive. *Details are described in “9. Service Explorer ”.	1. Error Number is displayed for 5 seconds. NO ** 2. Time when the error has occurred is displayed for 5 seconds. YMMDDhhmmss Y: Year MM: Month DD: Day hh: Hour mm: Minute ss: Second 3. Last Drive Error (1/2) is displayed for 5 seconds. ****** 4. Last Drive Error (2/2) is displayed for 5 seconds. ********	Press [4] [2] in service mode. Then press [0] [1] ~ [9] [9], the past 99 errors are displayed.

		5. Error occurring Disc type is displayedfor 5 seconds. MEDIA****** **6. Disc Maker ID is displayed for 5 seconds.** ********** **7. Factor of Drive Erroroccurring is left displayed** INFO*******	**Incase that the supplier cannot be identified, display is black out.**

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
Delete the Last Drive Error	Delete the Last Drive Error information stored on the DVD RAM-Drive.	CLR DRIVE	Press [9] [6] in service mode.
Turn on all FL/ LEDs	All segments of FL and all LEDs are turned on.	All segments are turned on.	Press [5] [1] in service mode.
S1 signal output	Forcibly superimpose the S1 signal (approx. 4.5V DC) on the EE chroma signal, and check the output on the S terminal.	S1 OUTPUT	Press [5] [2] in service mode.
S2 signal output	Forcibly superimpose the S2 signal (approx. 2V DC) on the EE chroma signal, and check the output on the S terminal.	S2 OUTPUT	Press [5] [3] in service mode.
Front connection inspection	Press all front keys and check the connection between Main P.C.B. and Front P.C.B.	 (1) Each time a key is pressed, segment turned on increases one by one. (2) Total umber of keys that have been pressed.	Press [5] [4] in service mode.

Item		FL display	Key operation
Mode name	**Description**		**(Remote controller key)**
Production Date Display	**Display the date when the unit was produced.**	PD YYYYMMDD **YYY: Year** **MM: Month** **DD: Day**	**Press [6] [1] in service mode.**
Display the accumlated working time	**Display the accumulated unit's working time.**	********** **(Indicating unit: Second)**	**Press [6] [4] in service mode.**

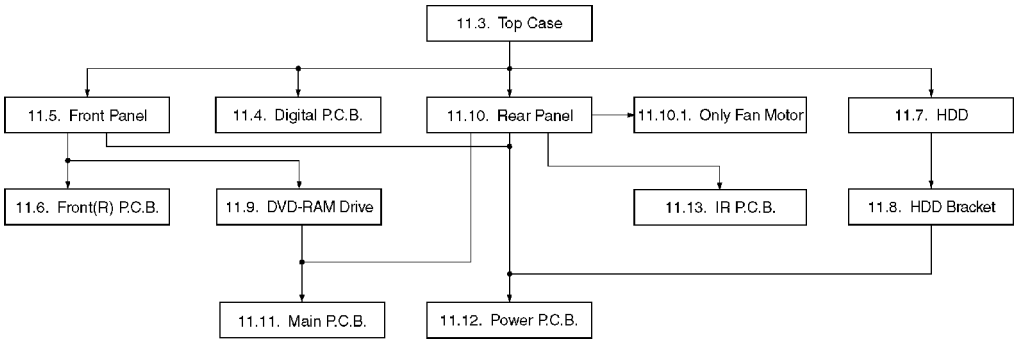
Item		FL display	Key operation
Mode name	Description		(Remote controller key)
Display the Error History	Display the Error History stored on the unit.	Display reason of error for 5 seconds. FTREC*** Display the time when the error has occurred for 5 seconds.. YYMMDDHHMM YY: Year MM: Month DD: Day HH: Hour MM: Minute Display the accumlated working time to occurring of the error for 5 seconds.. ********** (Indicating unit: Second)	Press [6] [5] in service mode. Then press [0] [1] ~ [1] [9], the past 19 error histories are displayed.
Delete the Error History	Delete Error History information stored on the unit.	CLR FTREC	Press [9] [7] in service mode.

Item		FL display	Key operation
Mode name	**Description**		**(Remote controller key)**
Tray OPEN/ CLOSE Test	**The RAM drive tray is opened and closed repeatedly.**	NO********* **"*" is number of open/ close cycle times.**	**Press [9] [1] in service mode** ***When releasing this mode, press the [POWER] button on Front Panel more than 10 seconds.**
Error code initialization	**Initialization of the last error code held by timer (Write in F00)**	CLR E-CODE	**Press [9] [8] in service mode.**
Initialize Service	**Last Drive Error, Error history and Error Codes stored on the unit are initialized to factory setting.**	CLR SERV	**Press [9] [9] in service mode.**
Finishing service mode	**Release Service Mode.**	**Display in STOP (E-E) mode.** **********	**Press power button on the front panel in service mode.**

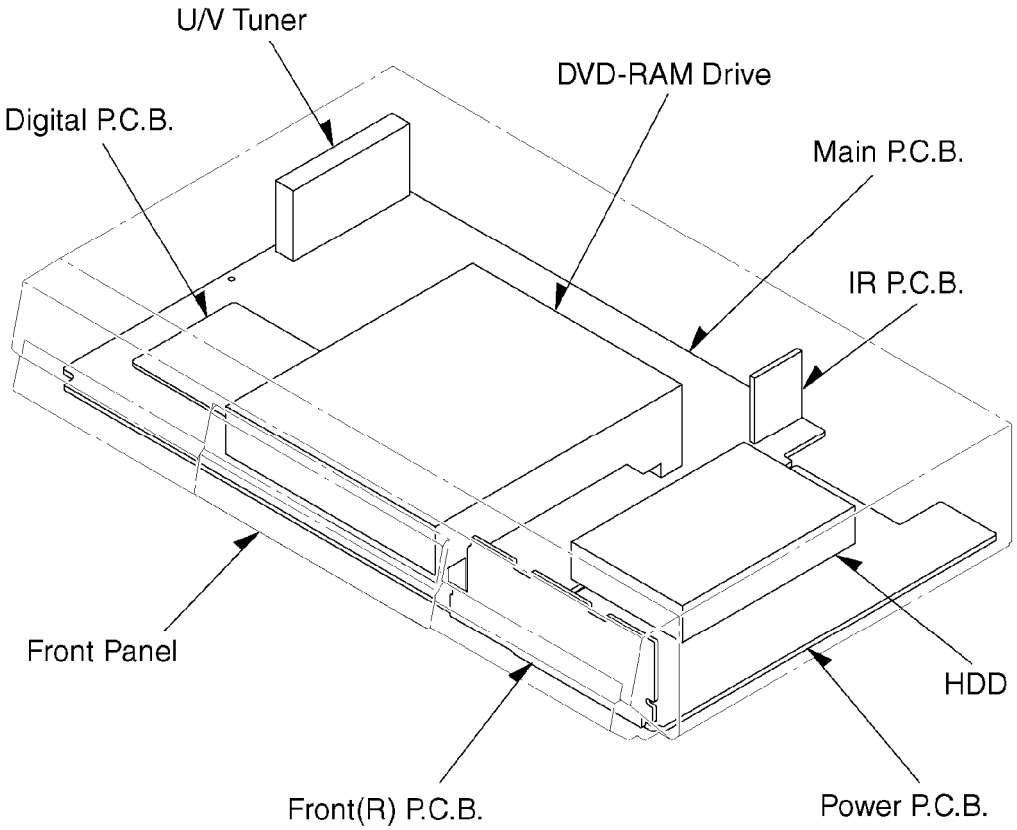
11. Assembling and Disassembling

11.1. Disassembly Flow Chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.
To assemble the unit, reverse the steps shown in the chart below.



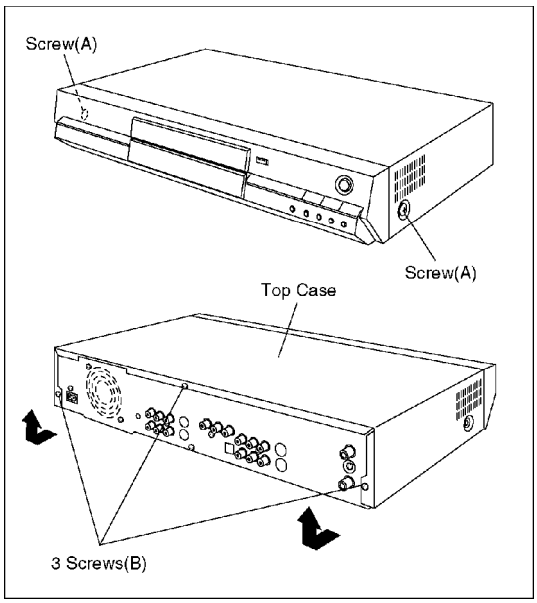
11.2. P.C.B. Positions



11.3. Top Case

1. Remove the 2 screws (A) and 3 screws (B).

2. Open the both ends at rear side of the Top Case a little and lift the Top Case in the direction of the arrows.



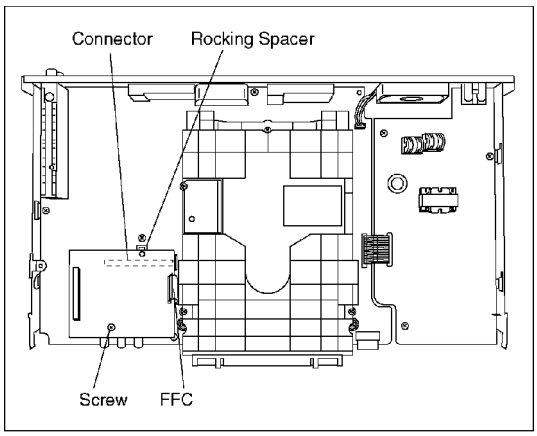
11.4. Digital P.C.B.

When replacing with Digital P.C.B., "UNFORMAT" indication is displayed and HDD must be formatted.
After that, **programme in the HDD will be lost**.
- How to format the HDD -
1) After "UNFORMAT" is displayed on the FL display, warning message for HDD format is appeared on the TV screen.
2) Select "YES" and press "ENTER" button on the remote controller, HDD will be formatted automatically.

1. Remove the FFC and a Screw.

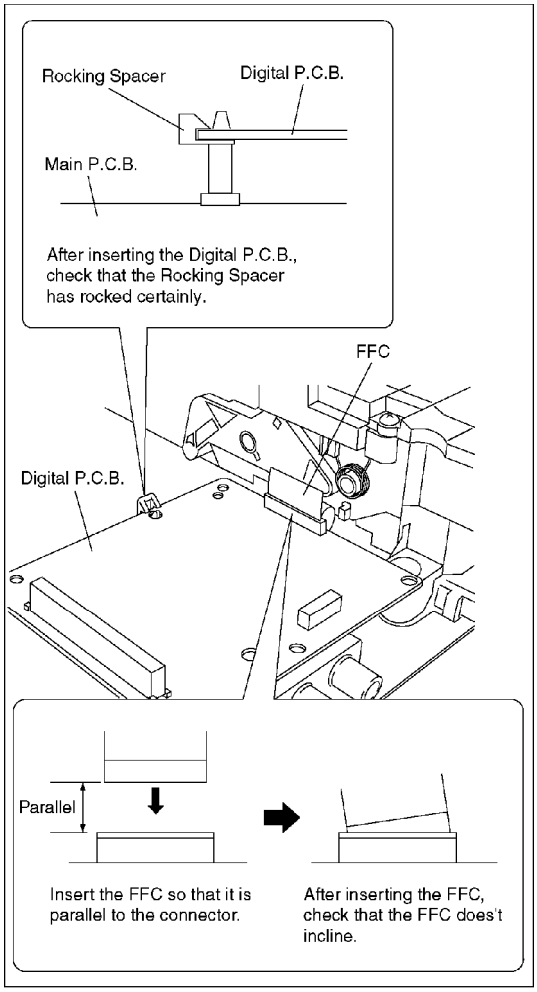
2. Unlock a Rocking Spacer.

3. Lift up Digital P.C.B. slightly so to disconnect Connector to remove Digital P.C.B.



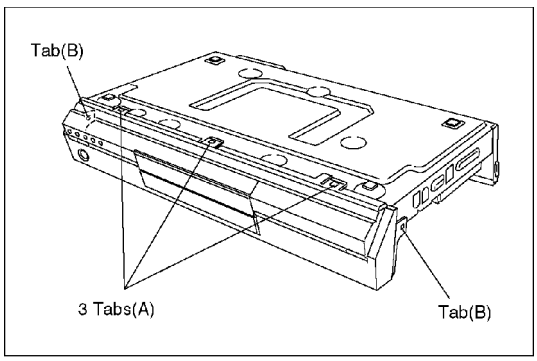
CAUTION:

When replacing Digital P.C.B., pay attention as below.

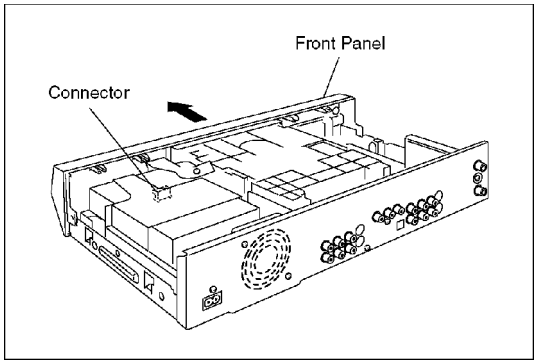

Rocking Spacer
Digital P.C.B.
Main P.C.B.
After inserting the Digital P.C.B., check that the Rocking Spacer has rocked certainly.
FFC
Digital P.C.B.
Parallel
Insert the FFC so that it is parallel to the connector.
After inserting the FFC, check that the FFC does't incline.

11.5. Front Panel

1. Remove 3 tabs (A) and 2 tabs (B) in this order. (The tab (A) and (B) should be removed at the same time, respectively.)

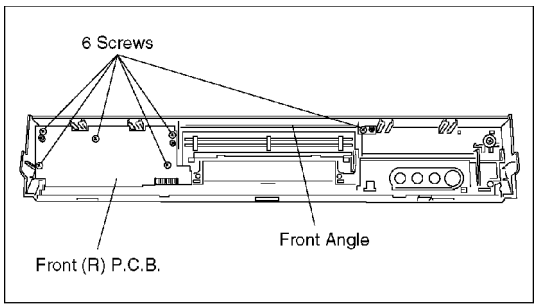


2. Move the front panel to front side straight and slowly so to remove it with Connector.



11.6. Front (R) P.C.B.

1. Remove 6 screws and Front Angle.



11.7. HDD

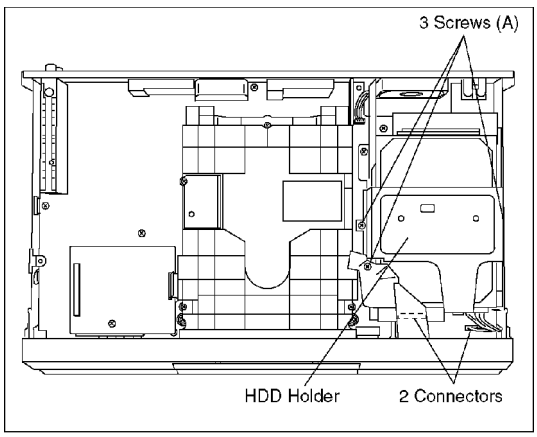
When replacing with HDD, "UNFORMAT" indication is displayed and HDD must be formatted.
After that, **programme in the HDD will be lost.**

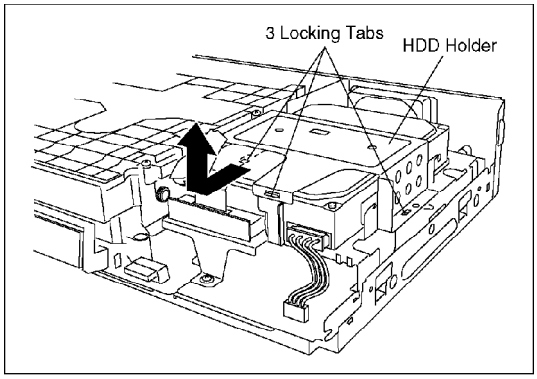
- How to format the HDD -

1) After "UNFORMAT" is displayed on the FL display, warning message for HDD format is appeared on the TV screen.
2) Select "YES" and press "ENTER" button on the remote controller, HDD will be formatted automatically.

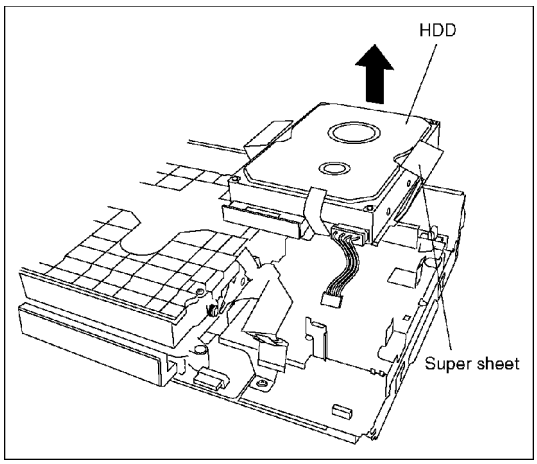
1. Remove 3 Screws (A) and 2 connectors.

2. Slide and lift up HDD Holder in the direction of the arrows so to unlock 3 locking tabs.





3. Lift up HDD with super sheet vertically and remove super sheet.



Handling of HDD

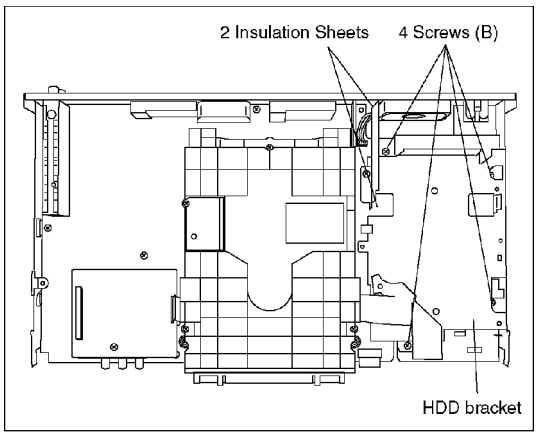
The following precautions should be taken when handling HDD.

1. Never give an impact to HDD. (Even a drop from 1cm height can be a cause of HDD failure.
2. When placing HDD on a workbench, provide a mat on a bench for shock absorption and anti-static purposes.
3. When installing HDD, release it from your hands only after confirming that it is fully set on the chassis.
4. Avoid stacking up HDD.
5. HDD is unstable and easy to fall. Do not stand it on its side face.
6. When handling HDD, hold its side faces to avoid static hazard.
7. Do not place HDD on its wrapping bag after removal. (Prevention of static hazard
8. Use a screwdriver with low impact and anti-static features.
9. To replace HDD, remove the vertical short-circuit pin.
(Keep the horizontal short-circuit pin in its place)

Note:
When replacing HDD, please make the rear jumper slave or cable select configuration.
(same configuration as HDD to exchange)

11.8. HDD Bracket

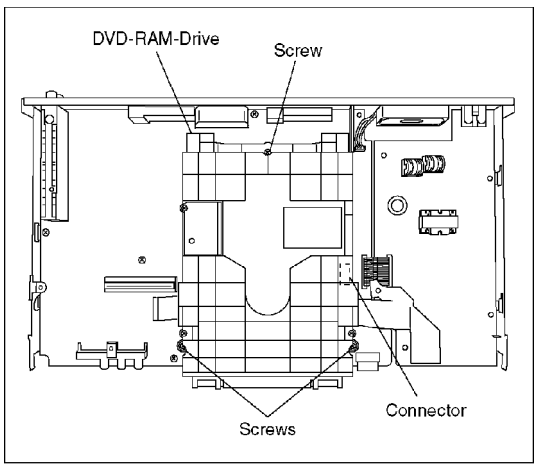
1. Remove 4 screws (B) and HDD Bracket with 2 Insulation Sheets.



11.9. DVD-RAM Drive

1. Remove 3 Screws.

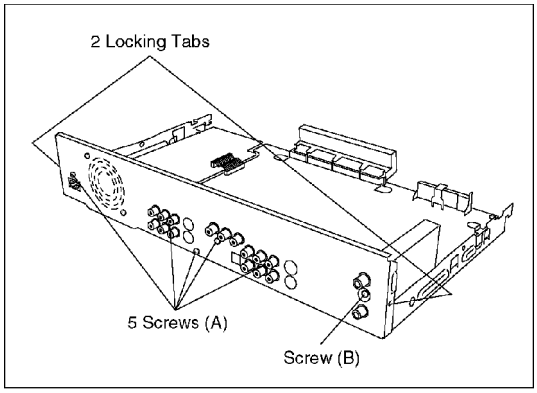
2. Pull out DVD-RAM Drive vertically so to remove it with Connector.



11.10. Rear Panel

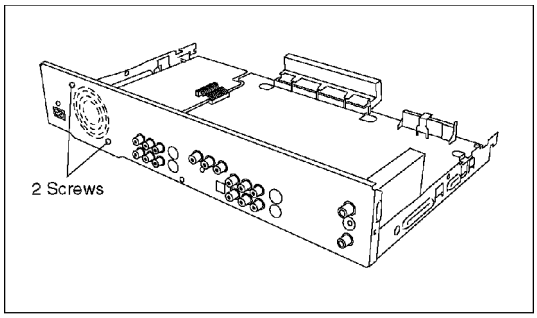
1. Remove the 5 screws (A) and screw (B).

2. Unlock 2 Locking Tabs to remove Rear Panel.

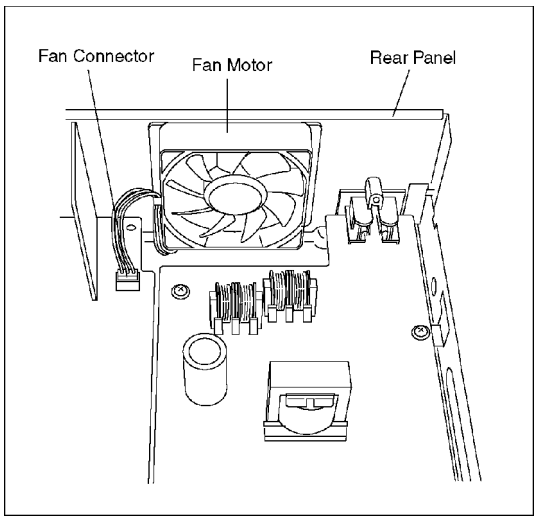


11.10.1. Only Fan Motor

1. Remove the 2 screws.

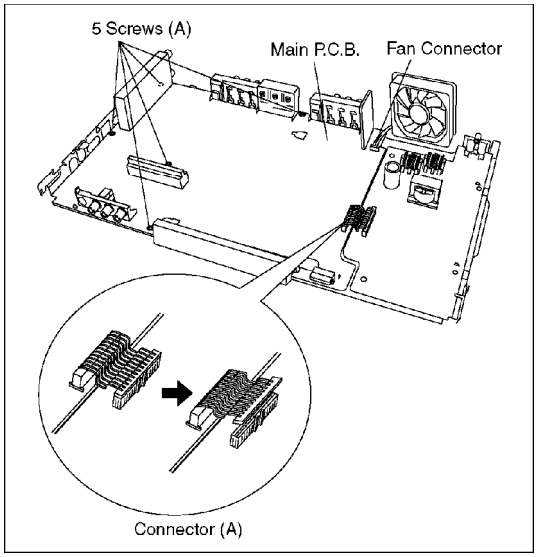


2. Remove Fan Connector to remove Fan Motor.

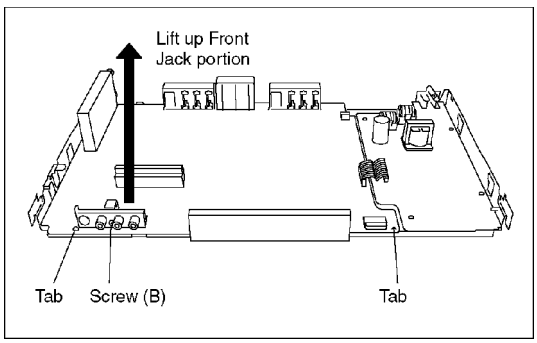


11.11. Main P.C.B.

1. Remove the 5 screws (A), Connector (A) and Fan Connector.



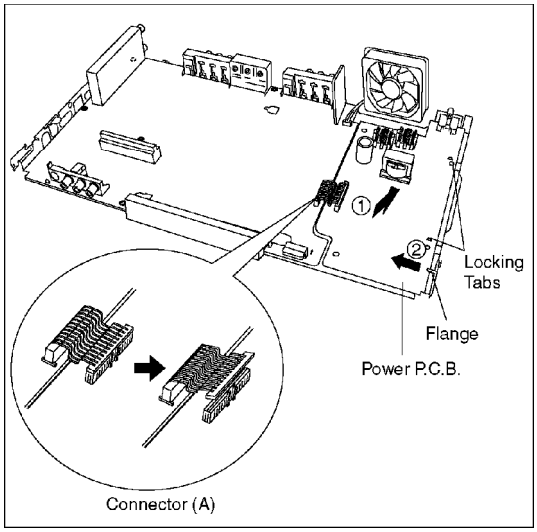
2. Remove a Screw (B) and lift up Front Jack portion of Main P.C.B. slightly so to unlock Tab to remove Main P.C.B..



11.12. Power P.C.B.

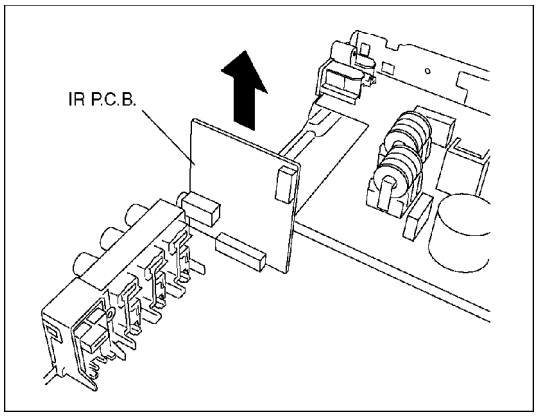
1. Remove Connector (A).

2. Lift up Power P.C.B. a little so to unlock 2 Tabs and slide Power P.C.B. so to unlock Flange to remove Power P.C.B.



11.13. IR P.C.B.

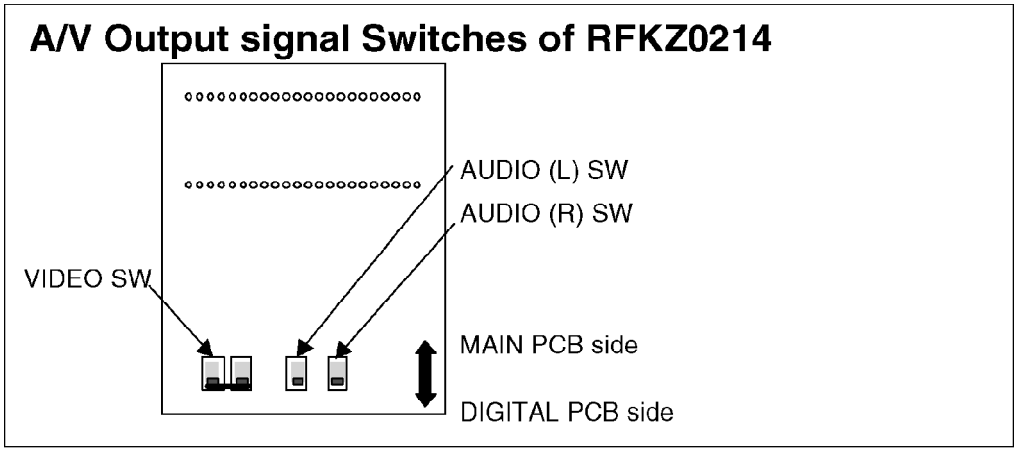
1. Pull out IR P.C.B. in the direction of the arrow.



12. Service Fixture and Tools

Part Number	Description	Compatibilit
RFKZ0125	Extension FFC (Digital P.C.B. - DVD-RAM Drive / 40 Pin)	Same as E50 series
RFKZ0168	Extension Cable (Main P.C.B. - Fan / 3 Pin)	Same as E50 series
RFKZ0169	Extension Cable (Power P.C.B. - HDD / 4 Pin)	Same as E100H seri
RFKZ0197	Extension Cable (Main P.C.B. - DVD-RAM Drive / 8 Pin)	New
RFKZ0214	Extension Cable (MainP.C.B. - Digital P.C.B. / 88 Pin)	New
RFKZ0215	Extension Cable (MainP.C.B. - Front (R) P.C.B. / 12 Pin)	New
RFKZ0216	Extension Cable (MainP.C.B. - Power P.C.B. / 23 Pin)	New

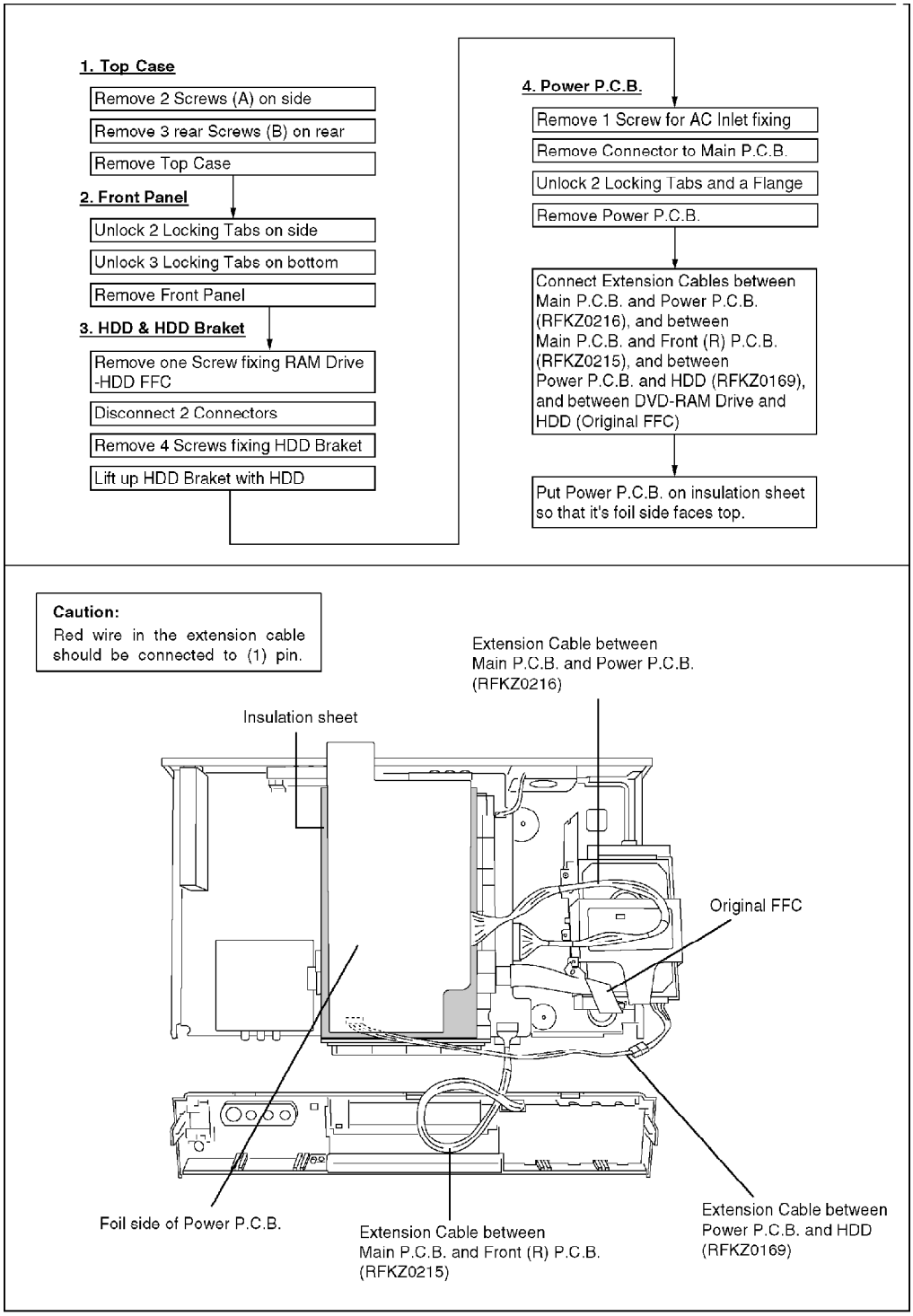
NOTE:
Extension Cable RFKZ0214 has A/V Output Signal switches.
Output signals can be switched from MAIN PCB side or DIGITAL PCB side.
When check MAIN PCB, turn switches to MAIN PCB side.
When check DIGITAL PCB, turn switches to DIGITAL P.C.B. side.



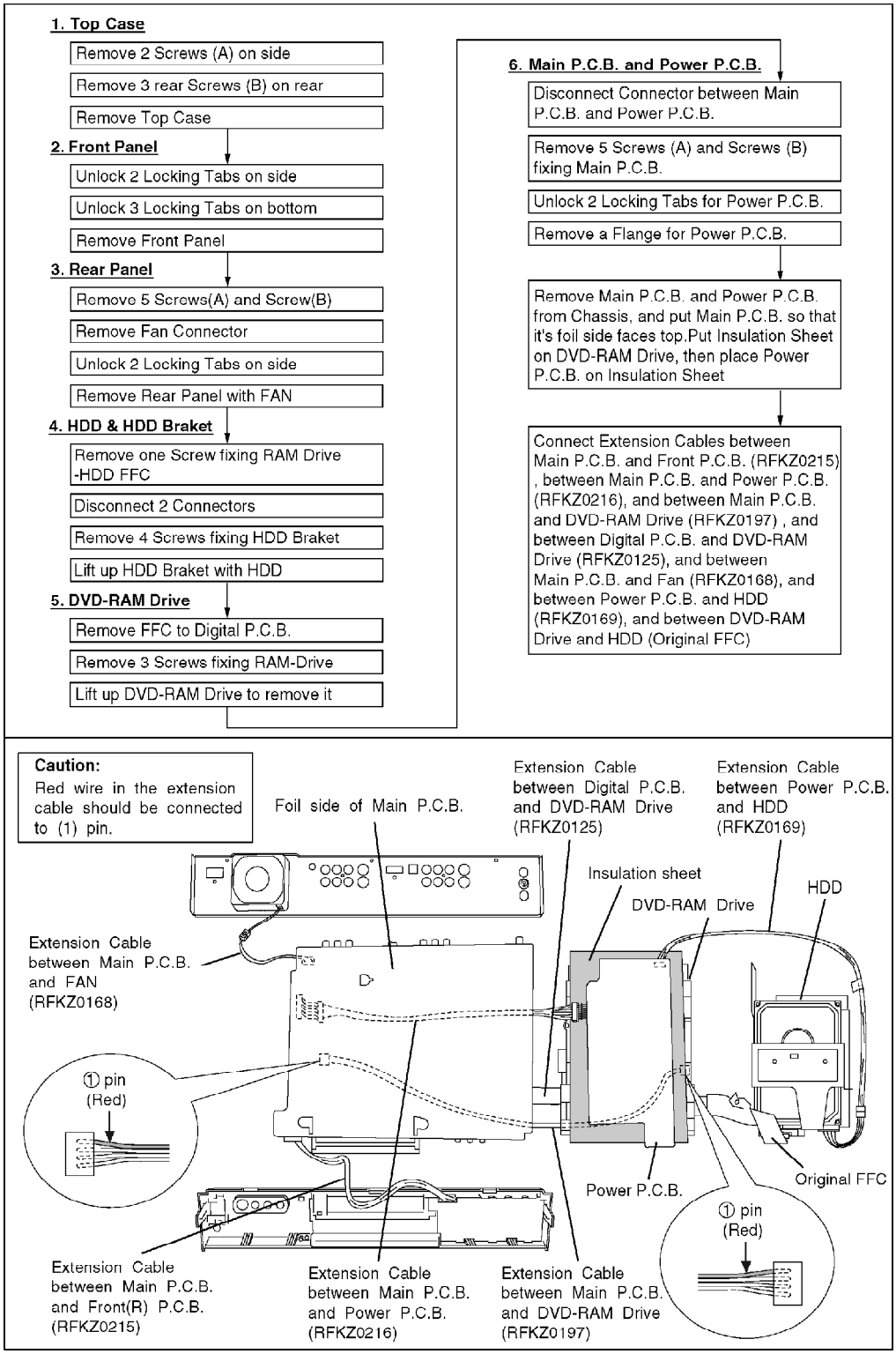
13. Service Positions

Note:
For description of the disassembling procedure, see the section 11.

13.1. Checking and Repairing of Power P.C.B.


1. Top Case
Remove 2 Screws (A) on side
Remove 3 rear Screws (B) on rear
Remove Top Case
2. Front Panel
Unlock 2 Locking Tabs on side
Unlock 3 Locking Tabs on bottom
Remove Front Panel
3. HDD & HDD Braket
Remove one Screw fixing RAM Drive -HDD FFC
Disconnect 2 Connectors
Remove 4 Screws fixing HDD Braket
Lift up HDD Braket with HDD
4. Power P.C.B.
Remove 1 Screw for AC Inlet fixing
Remove Connector to Main P.C.B.
Unlock 2 Locking Tabs and a Flange
Remove Power P.C.B.
Connect Extension Cables between Main P.C.B. and Power P.C.B. (RFKZ0216), and between Main P.C.B. and Front (R) P.C.B. (RFKZ0215), and between Power P.C.B. and HDD (RFKZ0169), and between DVD-RAM Drive and HDD (Original FFC)
Put Power P.C.B. on insulation sheet so that it's foil side faces top.
Caution:
Red wire in the extension cable should be connected to (1) pin.
Extension Cable between Main P.C.B. and Power P.C.B. (RFKZ0216)
Insulation sheet
Original FFC
Foil side of Power P.C.B.
Extension Cable between Main P.C.B. and Front (R) P.C.B. (RFKZ0215)
Extension Cable between Power P.C.B. and HDD (RFKZ0169)

13.2. Checking and Repairing of Main P.C.B.


1. Top Case
Remove 2 Screws (A) on side
Remove 3 rear Screws (B) on rear
Remove Top Case
2. Front Panel
Unlock 2 Locking Tabs on side
Unlock 3 Locking Tabs on bottom
Remove Front Panel
3. Rear Panel
Remove 5 Screws(A) and Screw(B)
Remove Fan Connector
Unlock 2 Locking Tabs on side
Remove Rear Panel with FAN
4. HDD & HDD Braket
Remove one Screw fixing RAM Drive -HDD FFC
Disconnect 2 Connectors
Remove 4 Screws fixing HDD Braket
Lift up HDD Braket with HDD
5. DVD-RAM Drive
Remove FFC to Digital P.C.B.
Remove 3 Screws fixing RAM-Drive
Lift up DVD-RAM Drive to remove it
6. Main P.C.B. and Power P.C.B.
Disconnect Connector between Main P.C.B. and Power P.C.B.
Remove 5 Screws (A) and Screws (B) fixing Main P.C.B.
Unlock 2 Locking Tabs for Power P.C.B.
Remove a Flange for Power P.C.B.
Remove Main P.C.B. and Power P.C.B. from Chassis, and put Main P.C.B. so that it's foil side faces top.Put Insulation Sheet on DVD-RAM Drive, then place Power P.C.B. on Insulation Sheet
Connect Extension Cables between Main P.C.B. and Front P.C.B. (RFKZ0215) , between Main P.C.B. and Power P.C.B. (RFKZ0216), and between Main P.C.B. and DVD-RAM Drive (RFKZ0197) , and between Digital P.C.B. and DVD-RAM Drive (RFKZ0125), and between Main P.C.B. and Fan (RFKZ0168), and between Power P.C.B. and HDD (RFKZ0169), and between DVD-RAM Drive and HDD (Original FFC)
Caution:
Red wire in the extension cable should be connected to (1) pin.
Foil side of Main P.C.B.
Extension Cable between Digital P.C.B. and DVD-RAM Drive (RFKZ0125)
Extension Cable between Power P.C.B. and HDD (RFKZ0169)
Insulation sheet
DVD-RAM Drive
HDD
Extension Cable between Main P.C.B. and FAN (RFKZ0168)
① pin (Red)
Power P.C.B.
Original FFC
① pin (Red)
Extension Cable between Main P.C.B. and Front(R) P.C.B. (RFKZ0215)
Extension Cable between Main P.C.B. and Power P.C.B. (RFKZ0216)
Extension Cable between Main P.C.B. and DVD-RAM Drive (RFKZ0197)

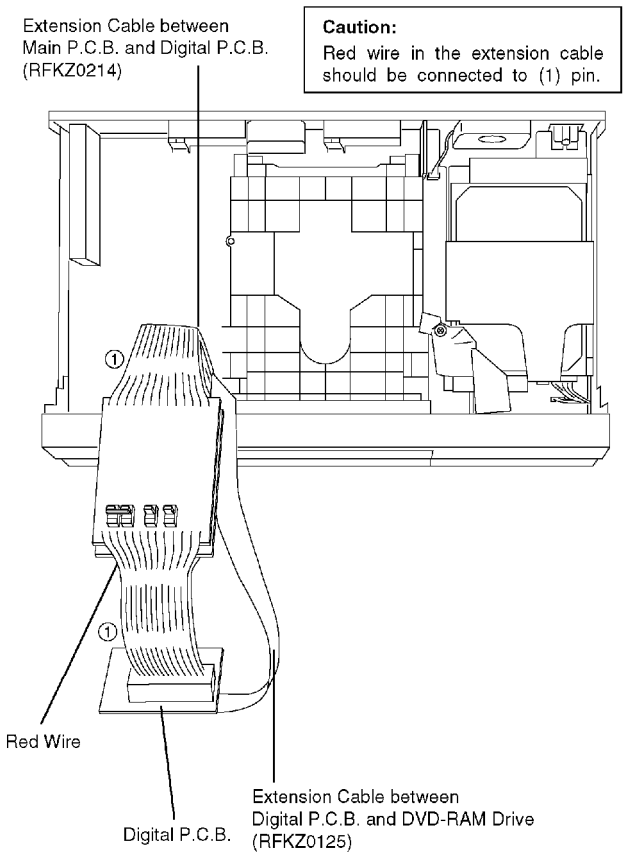
13.3. Checking and Repairing of Digital P.C.B.

1. Top Case

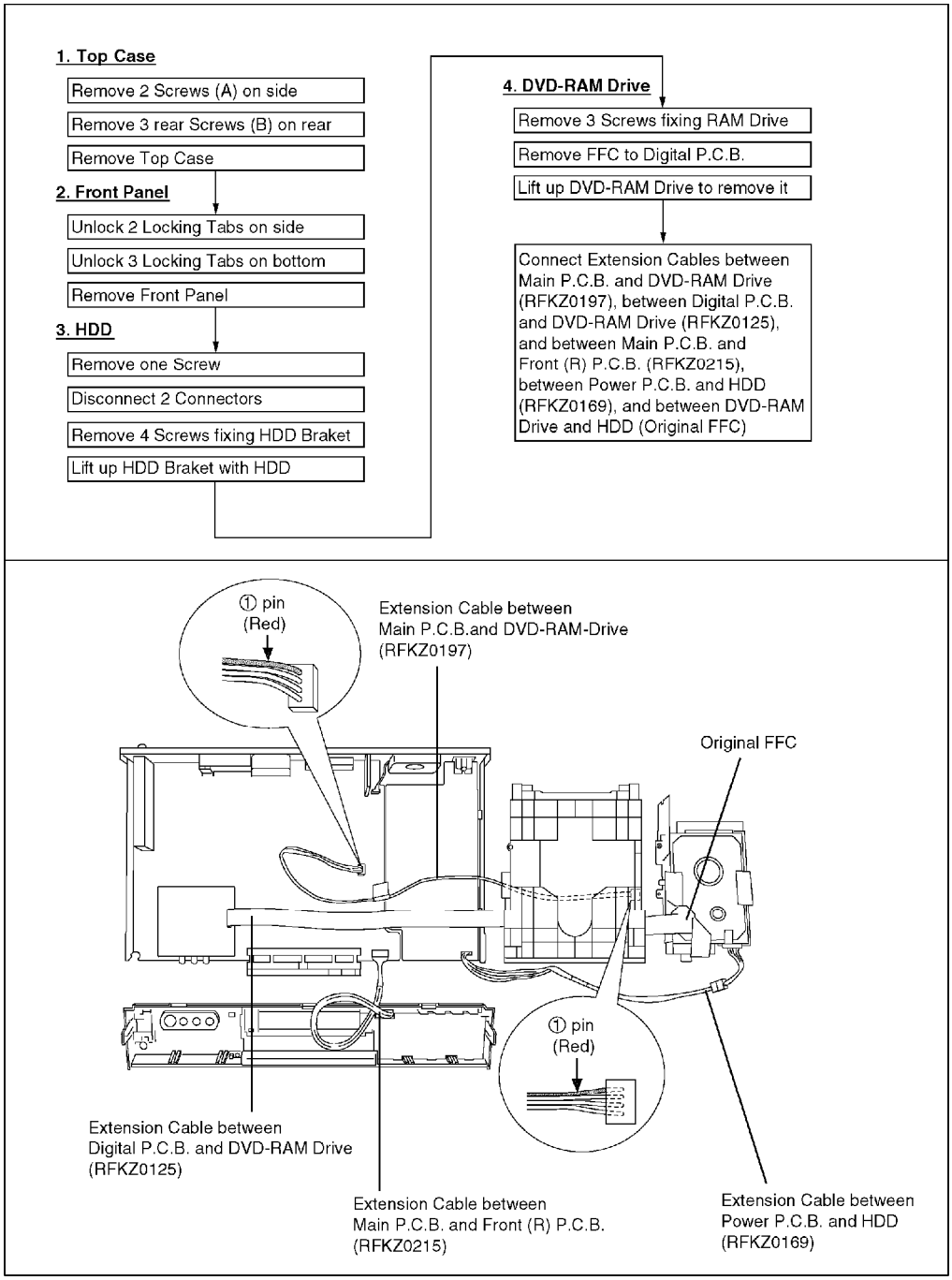
- Remove 2 Screws (A) on side
- Remove 3 rear Screws (B) on rear
- Remove Top Case

2. Digital P.C.B.

- Remove FFC to RAM-Drive
- Unlock a Rocking Spacer
- Remove a Screw fixing Digital P.C.B.
- Lift up Digital P.C.B. to remove it
- Connect Extension Cables between Main P.C.B. and Digital P.C.B. (RFKZ0214), and between Digital P.C.B. and DVD-RAM Drive (RFKZ0125).



13.4. Checking and Repairing of DVD-RAM Drive


1. Top Case
Remove 2 Screws (A) on side
Remove 3 rear Screws (B) on rear
Remove Top Case
2. Front Panel
Unlock 2 Locking Tabs on side
Unlock 3 Locking Tabs on bottom
Remove Front Panel
3. HDD
Remove one Screw
Disconnect 2 Connectors
Remove 4 Screws fixing HDD Braket
Lift up HDD Braket with HDD
4. DVD-RAM Drive
Remove 3 Screws fixing RAM Drive
Remove FFC to Digital P.C.B.
Lift up DVD-RAM Drive to remove it
Connect Extension Cables between Main P.C.B. and DVD-RAM Drive (RFKZ0197), between Digital P.C.B. and DVD-RAM Drive (RFKZ0125), and between Main P.C.B. and Front (R) P.C.B. (RFKZ0215), between Power P.C.B. and HDD (RFKZ0169), and between DVD-RAM Drive and HDD (Original FFC)
① pin (Red)
Extension Cable between Main P.C.B.and DVD-RAM-Drive (RFKZ0197)
Original FFC
① pin (Red)
Extension Cable between Digital P.C.B. and DVD-RAM Drive (RFKZ0125)
Extension Cable between Main P.C.B. and Front (R) P.C.B. (RFKZ0215)
Extension Cable between Power P.C.B. and HDD (RFKZ0169)

13.5. Checking and Repairing of HDD

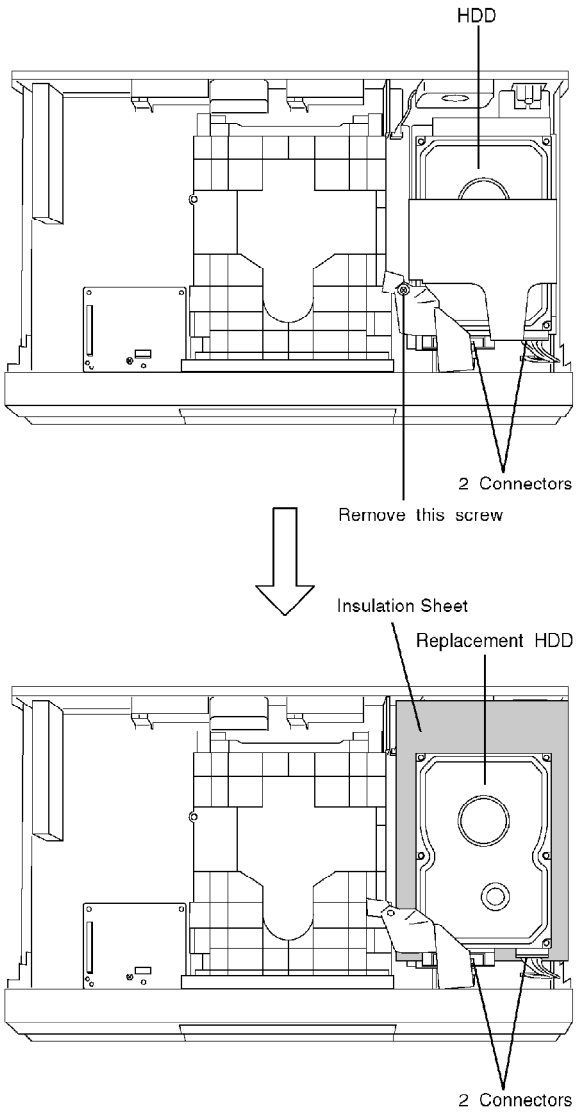
1. Top Case

Remove 2 Screws (A) on side

Remove 3 rear Screws (B).on rear

Remove Top Case

(1) Remove one Screw fixing RAM Drive-HDD FFC
(2) Disconnect 2 Connectors
(3) Put a Insulation Sheet on HDD
(4) Put Replacement HDD on the Insulation Sheet
(5) Connect 2 Connectors to Replacement HDD



13.6. Checking of IR P.C.B.

1. Top Case

Remove 2 Screws (A) and 3 Screws (B).

Remove Top Case.

2. Rear Panel

Remove 5 Screws (A) and one Screw (B).

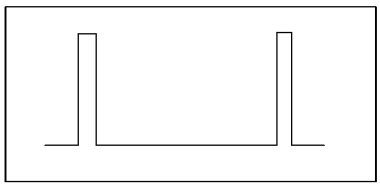
Unlock 2 Locking Tabs to remove Rear Panel.

Connect TV Monitor.

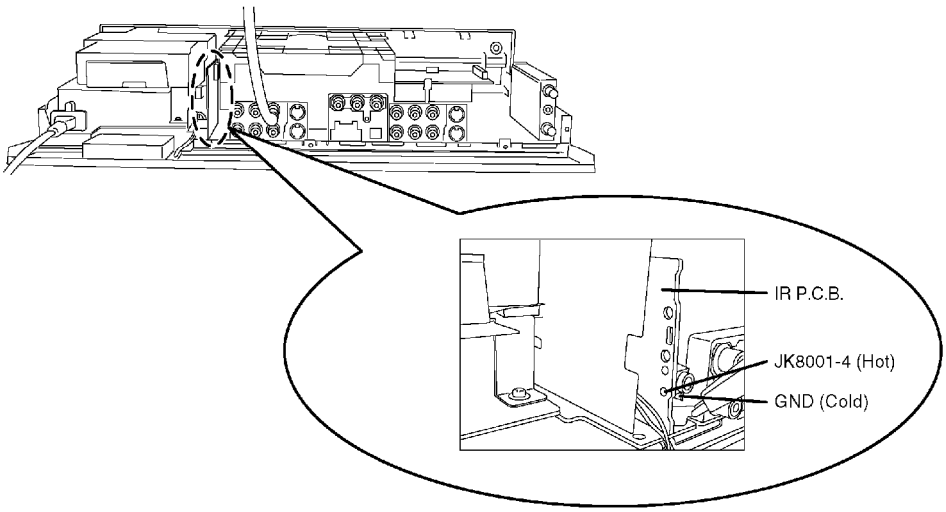
Connect Oscilloscope to JK8001-4 (Hot) and GND.

Checking Procedure:

1. Turn on the power. Then if "Welcome ..." was displayed on the TV monitor, press [RETURN]. (*After "EPG" has been set up, this indication will not appear.)
2. Press [FUNCTIONS].
3. Select "**SET UP**", and press [ENTER].
4. Select "**TV GUIDE Setting**" of the channel menu, and then press [ENTER].
5. Select "**No, repeat setup process**", and then press [ENTER].
6. Select "**USA**", and then press [ENTER].
7. Input "**0 2 0 3 2**", and then press [ENTER].
8. Select "Yes", and then press [ENTER].
9. Select "Yes", and then press [ENTER].
10. Select "L3", and then press [ENTER].
11. Press [ENTER].
12. Select "**Not Listed**", and then press [ENTER].
13. Press [ENTER], and then if the P.C.B. is "OK", pulse signals of approx. 4.5Vp-p are output twice from JK8001-4. (When you want to check again, select "**Test this code again**" and press [ENTER], then Pulse signals are output again.



*Recommended ranges of the Oscilloscope:
V: DC range, and 1V/div.
T: 1msec. /div.



14. Adjustment Procedures

14.1. After replacing the RAM Drive with new one

After replacing of RAM drive unit, TEST mode is not necessary. Please confirm operation for RAM drive

Caution:

In this case, all parameters are initialized.

14.2. When the unit does not operate normally after replacing the Timer Microprocessor with new one

in order to transmit the

Step	Operation	Descriptions
1	While power is ON, short IC7503-1 pin (RESET) and the GND.	“RESET (L)” is transmitted to the terminal of Timer Microprocesso 80 pin), then the unit operates nc

15. Standard Inspection Specifications after Making Repairs

After making repairs, we recommend performing the following inspection, to check normal operation.

No.	Procedure	Item to Check
1	Turn on the power, and confirm items pointed out.	Items pointed out should reappear.
2	Insert RAM disc.	The Panasonic RAM disc should be recog
3	Enter the EE (TU IN / AV IN - AV OUT) mode.	No abnormality should be seen in the pict sound or operation.
4	Perform auto recording and playback for one minute using the RAM disc.	No abnormality should be seen in the pict sound or operation.
5	Model with the HDD : Perform auto recording and playback for one minute using the HDD	No abnormality should be seen in the pict sound or operation. *Panasonic DVD-R disc should be used w recording and playback.
6	If a problem is caused by a VCD, DVD-R, DVD-Video, Audio-CD, or MP3, playback the test disc.	No abnormality should be seen in the pict sound or operation.
7	After checking and making repairs, upgrade the firmware to the latest version.	Make sure that [FIRM_SUCCESS] appears FL displays. *[UNSUPPORT] display means the unit is updated to newest same version. Then ve is not necessary.
8	Transfer [9][9] in the service mode setting, and initialize the service settings (return various settings and error information to their default values. The laser time is not included in this initialization).	Make sure that [CLR SERV] appears in the display. After checking it, turn the power off.
9	When replacing of RAM drive, transfer [9] [5] in the service mode setting to delete Laser used time.	Make sure that [CLR LASER] appears in th display. After that, turn power off.

Use the following checklist to establish the judgement criteria for the picture and sound.

Item	Contents	Check	Item	Contents
Picture	Block noise		Sound	Distorted sound
	Crosscut noise			Noise (static, background noise, etc.)
	Dot noise			The sound level is too low.
	Picture disruption			The sound level is too high.
	Not bright enough			The sound level changes.
	Too bright			
	Flickering color			
	Color fading			

16. Voltage and Waveform Chart

Note)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

16.1. Power P.C.B.

16.2. Main P.C.B.

16.3. IR P.C.B.

16.4. Front (R) P.C.B.

16.5. P9001 Connector

16.6. Waveform Chart

17. Abbreviations

INITIAL/LOGO		ABBREVIATIONS
A	A0~UP	ADDRESS
	ACLK	AUDIO CLOCK
	AD0~UP	ADDRESS BUS
	ADATA	AUDIO PES PACKET DATA
	ALE	ADDRESS LATCH ENABLE
	AMUTE	AUDIO MUTE
	AREQ	AUDIO PES PACKET REQUEST
	ARF	AUDIO RF
	ASI	SERVO AMP INVERTED INPUT
	ASO	SERVO AMPOUTPUT
	ASYNC	AUDIO WORD DISTINCTION SYNC
B	BCK	BIT CLOCK (PCM)
	BCKIN	BIT CLOCK INPUT
	BDO	BLACK DROP OUT
	BLKCK	SUB CODE BLOCK CLOCK
	BOTTOM	CAP. FOR BOTTOM HOLD
	BYP	BYPATH
	BYTCK	BYTE CLOCK
C	CAV	CONSTANT ANGULAR VELOCITY
	CBDO	CAP. BLACK DROP OUT
	CD	COMPACT DISC
	CDSCK	CD SERIAL DATA CLOCK
	CDSRDATA	CD SERIAL DATA
	CDRF	CD RF (EFM) SIGNAL
	CDV	COMPACT DISC-VIDEO
	CHNDATA	CHANNEL DATA
	CKSL	SYSTEM CLOCKSELECT
	CLV	CONSTANT LINEAR VELOCITY
	COFTR	CAP. OFF TRACK
	CPA	CPU ADDRESS
	CPCS	CPU CHIP SELECT
	CPDT	CPU DATA
	CPUADR	CPU ADDRESS LATCH
	CPUADT	CPU ADDRESS DATA BUS
	CPUIRQ	CPU INTERRUPT REQUEST
	CPRD	CPU READ ENABLE
	CPWR	CPU WRITE ENABLE
	CS	CHIPSELECT
	CSYNCIN	COMPOSITE SYNC IN
	CSYNCOUT	COMPOSITE SYNC OUT

INITIAL/LOGO		ABBREVIATIONS
D	DACCK	D/A CONVERTER CLOCK
	DEEMP	DEEMPHASIS BIT ON/OFF
	DEMPH	DEEMPHASIS SWITCHING
	DIG0~UP	FL DIGIT OUTPUT
	DIN	DATA INPUT
	DMSRCK	DM SERIAL DATA READ CLOCK
	DMUTE	DIGITAL MUTE CONTROL
	DO	DROP OUT
	DOUT0~UP	DATAOUTPUT
	DRF	DATA SLICE RF (BIAS)
	DRPOUT	DROP OUT SIGNAL
	DREQ	DATA REQUEST
	DRESP	DATA RESPONSE
	DSC	DIGITAL SERVO CONTROLLER
	DSLF	DATA SLICE LOOP FILTER
	DVD	DIGITAL VIDEO DISC

INITIAL/LOGO		ABBREVIATIONS
E	EC	ERROR TORQUE CONTROL
	ECR	ERROR TORQUE CONTROL REFERENCE
	ENCSEL	ENCODER SELECT
	ETMCLK	EXTERNAL M CLOCK (81MHz/ 40.5MHz)
	ETSCLK	EXTERNAL S CLOCK (54MHz)
F	FBAL	FOCUS BALANCE
	FCLK	FRAME CLOCK
	FE	FOCUS ERROR
	FFI	FOCUS ERROR AMP INVERTED INPUT
	FEO	FOCUS ERROR AMP OUTPUT
	FG	FREQUENCY GENERATOR
	FSC	FREQUENCY SUB CARRIER
	FSCK	FS (384 OVER SAMPLING) CLOCK
G	GND	COMMON GROUNDING (EARTH)
H	HA0~UP	HOST ADDRESS
	HD0~UP	HOST DATA
	HINT	HOST INTERRUPT
	HRXW	HOST READ/WRITE

INITIAL/LOGO		ABBREVIATIONS
I	IECOUT	IEC958 FORMAT DATA OUTPUT
	IPFRAG	
	IREF	INTERPOLATION FLAG
	ISEL	I (CURRENT) REFERENCE
		INTERFACE MODE SELECT
L	LDON	LASER DIODE CONTROL
	LPC	LASER POWER CONTROL
	LRCK	L CH/R CH DISTINCTION CLOCK
M	MA0~UP	MEMORY ADDRESS
	MCK	MEMORY CLOCK
	MCKI	MEMORY CLOCK INPUT
	MCLK	MEMORY SERIAL COMMAND CLOCK
	MDATA	MEMORY SERIAL COMMAND DATA
	MDQ0~UP	MEMORY DATA INPUT/OUTPUT
	MDQM	MEMORY DATA I/O MASK
	MLD	MEMORYSERIAL COMMAND LOAD
	MPEG	MOVING PICTURE EXPERTS GROUP
O	ODC	OPTICAL DISC CONTROLLER
	OFTR	OFF TRACKING
	OSCI	OSCILLATOR INPUT
	OSCO	OSCILLATOR OUTPUT
	OSD	ON SCREEN DISPLAY
P	P1~UP	PORT
	PCD	CD TRACKING PHASE DIFFERENCE
	PCK	PLL CLOCK
	PDVD	DVD TRACKING PHASE DIFFERENCE
	PEAK	CAP. FOR PEAK HOLD
	PLLCLK /	CHANNEL PLL CLOCK
	PLLOK	PLL LOCK
	PWMCTL	PWM OUTPUT CONTROL
	PWMDA	PULSE WAVE MOTOR DRIVEA
	PWMOA, B	PULSE WAVE MOTOR OUT A, B

INITIAL/LOGO		ABBREVIATIONS
R	RE	READ ENABLE
	RFENV	RF ENVELOPE
	RFO	RF PHASE DIFFERENCE
	RS	OUTPUT
	RSEL	(CD-ROM) REGISTER SELECT
	RST	RF POLARITY SELECT
	RSV	RESET
		RESERVE
S	SBI0, 1	SERIAL DATA INPUT
	SBO0	SERIAL DATA OUTPUT
	SBT0, 1	SERIAL CLOCK
	SCK	SERIAL DATA CLOCK
	SCKR	AUDIO SERIAL CLOCK
	SCL	RECEIVER
	SCLK	SERIAL CLOCK
	SDA	SERIAL CLOCK
	SEG0~UP	SERIAL DATA
	SELCLK	FL SEGMENT OUTPUT
	SEN	SELECTCLOCK
	SIN1, 2	SERIAL PORT ENABLE
	SOUT1, 2	SERIAL DATA IN
	SPDI	SERIAL DATA OUT
	SPDO	SERIAL PORT DATA INPUT
	SPEN	SERIAL PORT DATA OUTPUT
	SPRCLK	SERIAL PORT R/W ENABLE
	SPWCLK	SERIAL PORT READ CLOCK
	SQCK	SERIAL PORT WRITE CLOCK
	SQCX	SUB CODE Q CLOCK
	SRDATA	SUBCODE Q DATA READ
	SRMADR	CLOCK
	SRMDT0~7	SERIAL DATA
		SRAM ADDRESS BUS
	SS	SRAM DATA BUS 0~7
	STAT	START/STOP
	STCLK	STATUS
	STD0~UP	STREAM DATA CLOCK
	STENABLE	STREAM DATA
		STREAM DATA INPUT ENABLE
	STSEL	STREAM DATA POLARITY
	STVALID	SELECT
	SUBC	STREAM DATAVALIDITY
	SBCK	SUB CODE SERIAL
	SUBQ	SUB CODE CLOCK
	SYSCLK	SUB CODE Q DATA
		SYSTEM CLOCK

		SYSTEM CLOCK

INITIAL/LOGO		ABBREVIATIONS
T	TE	TRACKING ERROR
	TIBAL	BALANCE CONTROL
	TID	BALANCE OUTPUT 1
	TIN	BALANCE INPUT
	TIP	BALANCE INPUT
	TIS	BALANCE OUTPUT 2
	TPSN	OP AMP INPUT
	TPSO	OP AMP OUTPUT
	TPSP	OP AMP INVERTED INPUT
	TRCRS	TRACK CROSSSIGNAL
	TRON	TRACKING ON
	TRSON	TRAVERSE SERVO ON

INITIAL/LOGO		ABBREVIATIONS
V	VBLANK	V BLANKING
	VCC	COLLECTOR POWER SUPPLY VOLTAGE
	VCDCONT	VIDEO CD CONTROL (TRACKING
	VDD	BALANCE)
	VFB	DRAIN POWER SUPPLY
	VREF	VOLTAGE
	VSS	VIDEO FEED BACK VOLTAGE REFERENCE SOURCE POWER SUPPLYVOLTAGE
W	WAIT	BUS CYCLE WAIT
	WDCK	WORD CLOCK
	WEH	WRITE ENABLE HIGH
	WSR	WORD SELECT RECEIVER

INITIAL/LOGO		ABBREVIATIONS
X	X	X' TAL
	XALE	X ADDRESS LATCH ENABLE
	XAREQ	X AUDIO DATA REQUEST
	XCDROM	X CD ROM CHIP SELECT
	XCS	X CHIP SELECT
	XCSYNC	X COMPOSITE SYNC
	XDS	X DATA STROBE
	XHSYNCO	X HORIZONTAL SYNC OUTPUT
	XHINT	XH INTERRUPTREQUEST
	XI	X' TAL OSCILLATOR INPUT
	XINT	X INTERRUPT
	XMW	X MEMORY WRITE ENABLE
	XO	X' TAL OSCILLATOR OUTPUT
	XRE	X READ ENABLE
	XSRMCE	X SRAM CHIP ENABLE
	XSRMOE	X SRAM OUTPUT ENABLE
	XSRMWE	X SRAM WRITE ENABLE
	XVCS	X V-DEC CHIPSELECT
	XVDS	X V-DEC CONTROL BUS
	XVSYNCO	STROBE
		X VERTICAL SYNC OUTPUT

18. Block Diagram

18.1. Power Supply Block Diagram

18.2. Analog Video Block Diagram

18.3. Analog Audio Block Diagram

18.4. Timer Block Diagram

18.5. Digital Block Diagram

18.6. Digital Block IC Pin Terminal Chart (TC1-22)

19. Schematic Diagram

19.1. Interconnection Schematic Diagram

19.2. Main Power Schematic Diagram

19.3. Sub Power Section (Main P.C.B. (1/5)) Schematic Diagram (P)

19.4. Main Net Section (Main P.C.B. (2/5)) Schematic Diagram (M)

19.5. Video I/O Section (Main P.C.B. (3/5)) Schematic Diagram (V)

19.6. Audio Main Section (Main P.C.B. (4/5)) Schematic Diagram (A)

19.7. Timer Section (Main P.C.B. (5/5)) Schematic Diagram (T)

19.8. Glue Net Section (Digital P.C.B. (1/5)) Schematic Diagram (GN)

19.9. AV Encoder Section (Digital P.C.B. (2/5)) Schematic Diagram (EN)

19.10. Real Time Stream Control (RTSC) Section (Digital P.C.B. (3/5)) Schematic Diagram (TR)

19.11. AV Decoder/Main CPU Section (Digital P.C.B. (4/5)) Schematic Diagram (MC)

19.12. Audio I/O Section (Digital P.C.B. (5/5)) Schematic Diagram (AI)

19.13. IR Schematic Diagram

19.14. Front (R) Schematic Diagram

20. Print Circuit Board

20.1. Power P.C.B.

20.2. Main P.C.B.

20.2.1. Main P.C.B. (1/4 Section)

20.2.2. Main P.C.B. (2/4 Section)

20.2.3. Main P.C.B. (3/4 Section)

20.2.4. Main P.C.B. (4/4 Section)

20.2.5. Main P.C.B. Address Information

20.3. Digital P.C.B.

20.3.1. Digital P.C.B. (Component Side)

20.3.2. Digital P.C.B. (Foil Side)

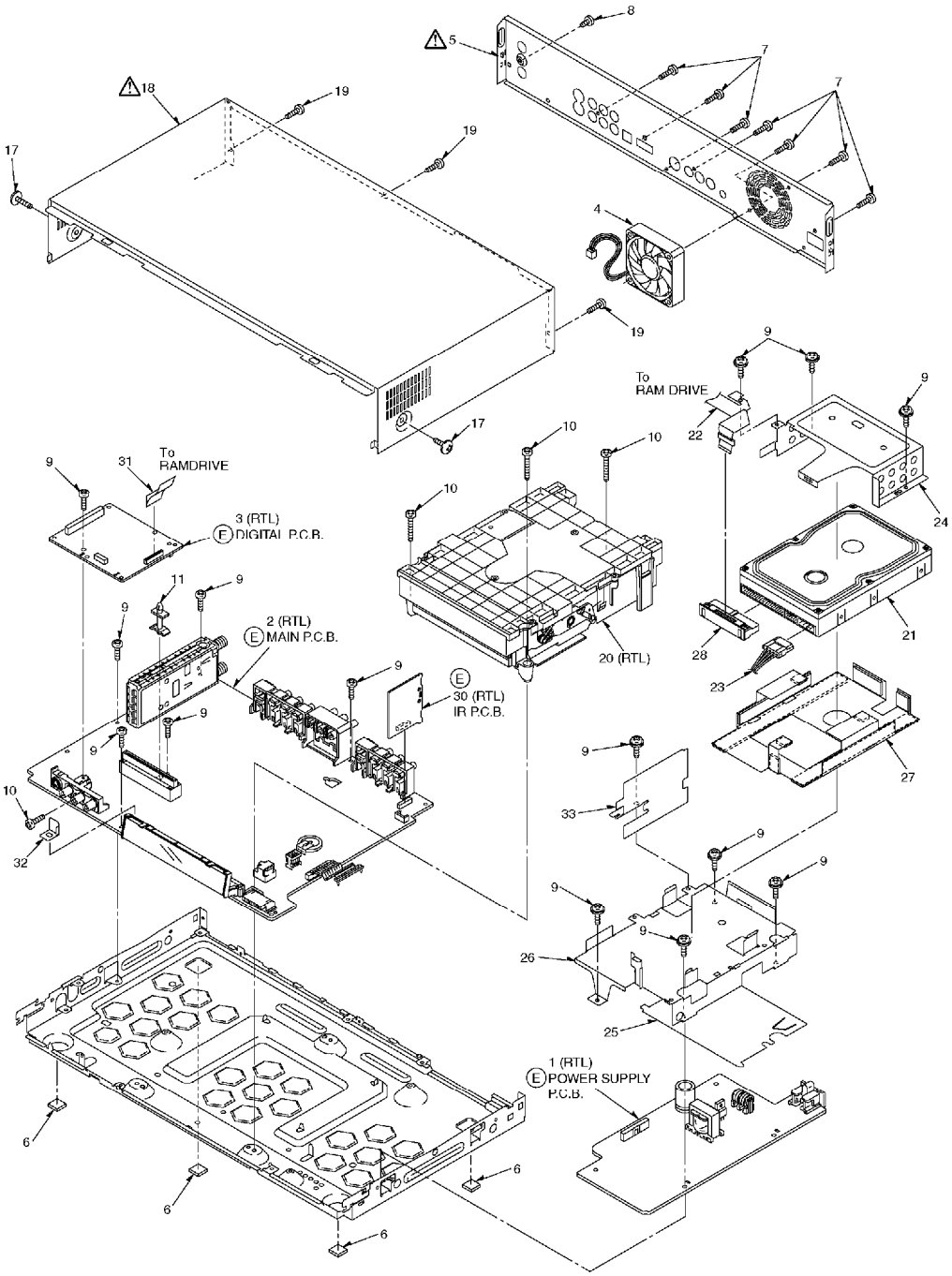
20.3.3. Digital P.C.B. Address Information

20.4. IR P.C.B.

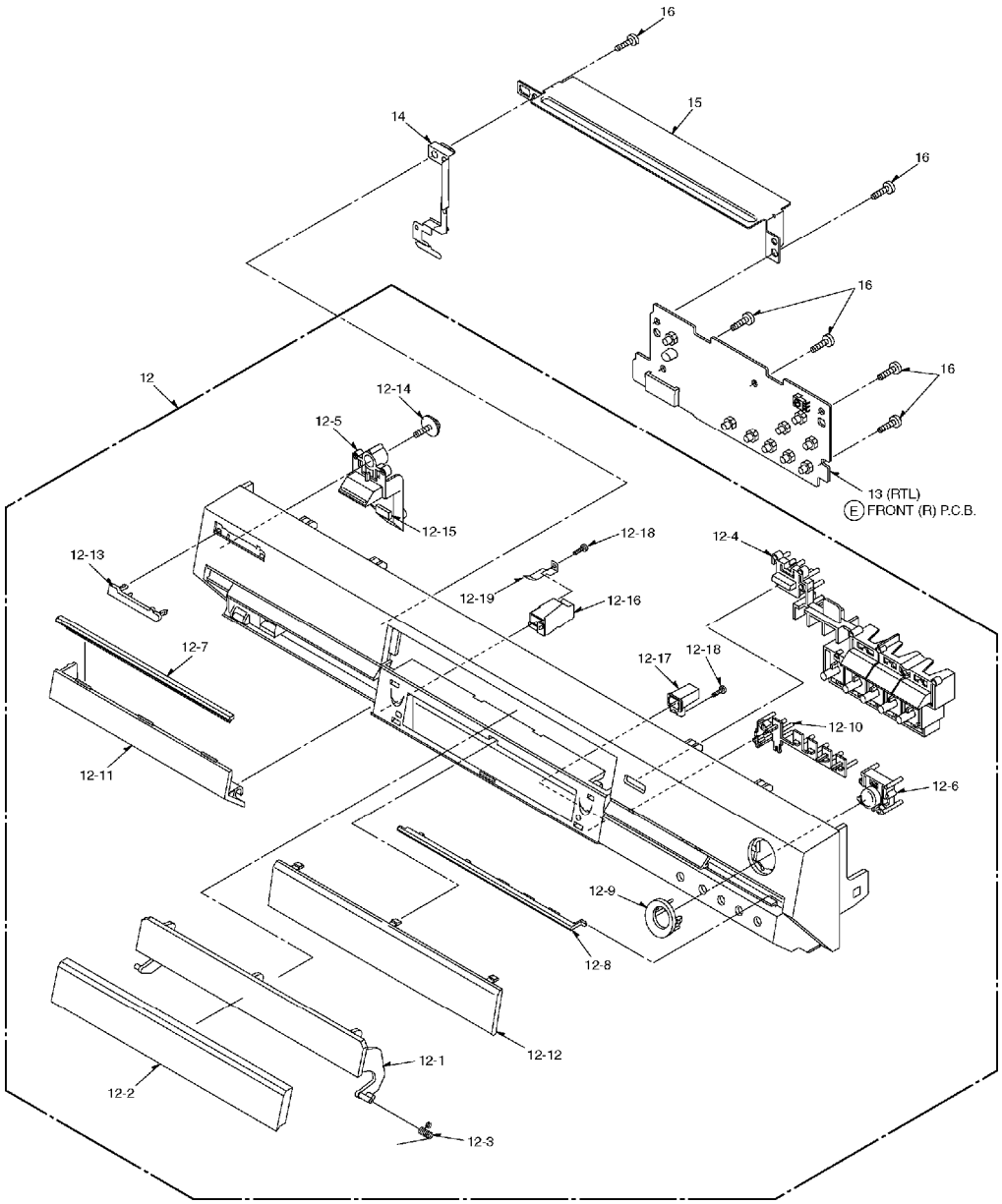
20.5. Front (R) P.C.B.

21. Exploded Views

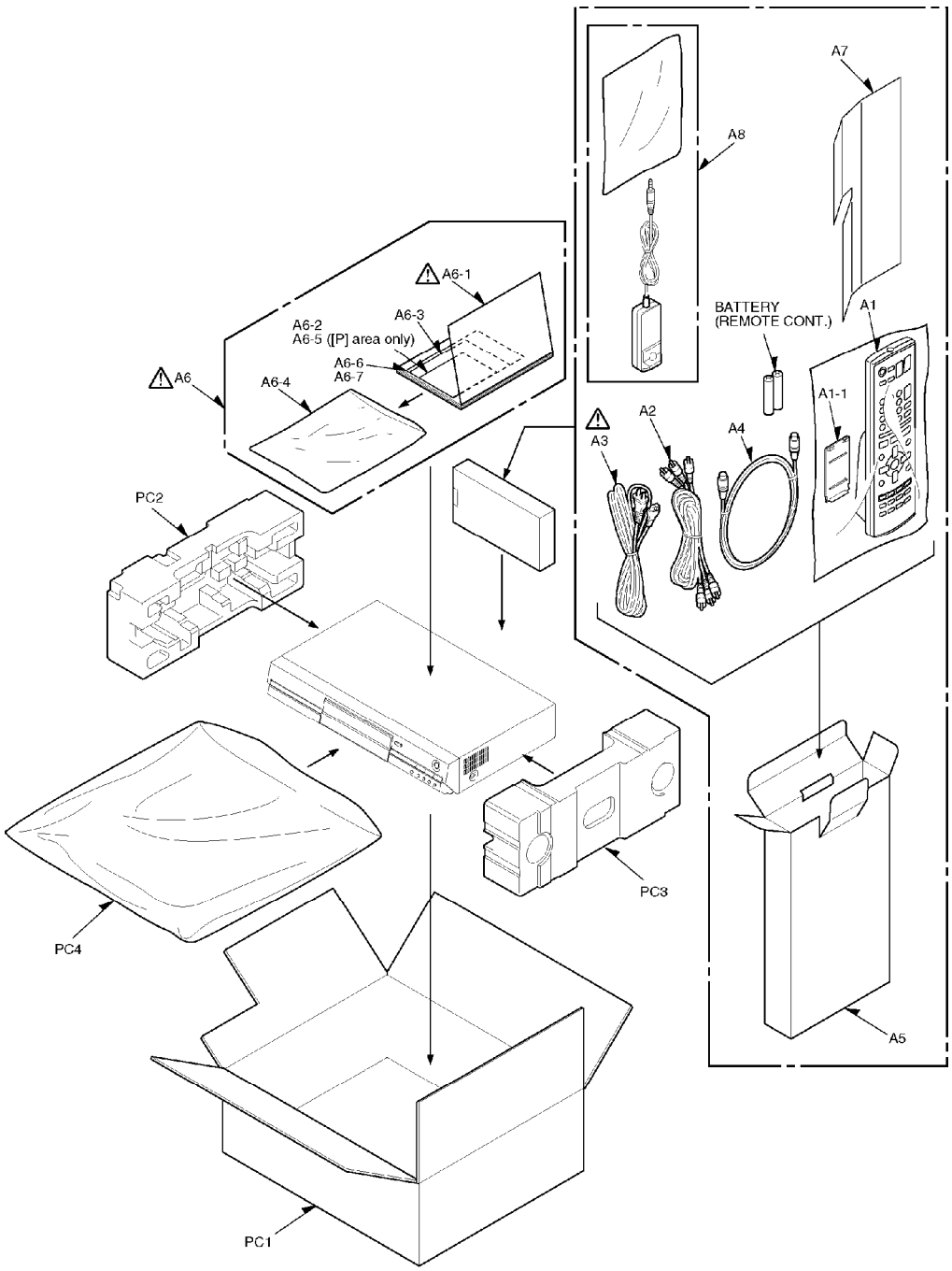
21.1. Casing Parts & Mechanism Section 1



21.2. Casing Parts & Mechanism Section 2



21.3. Packing & Accessories Section



22. Replacement Parts List

Notes:

***Important safety notice:**

Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

***Warning: This product uses a laser diode. Refer to caution statements.**

***Capacity values are in microfarads (μ F) unless specified otherwise, P=Pico-farads (pF), F= Farads (F).**
***Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM).**
***The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.**
***"<IA>"-"<IB>", marks in Remarks indicate languages of instruction manuals. [<IA>: English, <IB>: Canadian French] All parts aresupplied by S.P.C..**
***Supply of CD-ROM, in accordance with license protection, is allowable as replacement parts only for customers who accidentally damaged or lost their own.**

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	01	CASING/ACCESSORY/PACKING		
1	VEP01950B	POWER SUPPLY P.C.B.	1	(RTL)
2	REP3662F	MAIN P.C.B.	1	(RTL)
3	REP3774G	DIGITAL P.C.B.	1	(P)
3	RFKBE85HPC	DIGITAL P.C.B.	1	(PC)
4	L6FAKCCE0002	FAN MOTOR	1	
5	RGR0350E-C	REAR PANEL	1	(P) ⚠
5	RGR0350E-D	REAR PANEL	1	(PC) ⚠
6	RKA0144-K	FOOT RUBBER	4	
7	VHD0690	SCREW	7	
8	XSN3+4FZ	SCREW	1	
9	RHD30111	SCREW	14	
10	RHD30115	SCREW	4	
11	RMX0298	PCB SPACER	1	
12	RYP1243A-S	FRONT PANEL ASS'Y	1	
12-1	RKF0700-S	TRAY DOOR	1	
12-2	RGK1810-S	TRAY ORNAMENT	1	
12-3	VMB3410	SPRING	1	
12-4	RGU2318A-S	OPERATION BUTTON	1	
12-5	RGU2289-S	POWER BUTTON	1	
12-6	RGU2291A-Q	REC BUTTON	1	
12-7	RGK1774-S	FRONT ORNAMENT(L)	1	
12-8	RGK1775-S	FRONT ORNAMENT(R)	1	
12-9	RGK1773-S	REC BUTTON RING	1	
12-10	RGL0663-Q	PANEL LIGHT	1	
12-11	RKF0689G-S	PANEL DOOR	1	
12-12	RGK1811-S	FL ORNAMENT	1	
12-13	VGB0560	PANASONIC BADGE	1	
12-14	RHD26016	SCREW	1	
12-15	RMX0299	DAMPER SHEET	1	
12-16	RMR1637-W	REFLECTOR DVD	1	
12-17	RMR1638-W	REFLECTOR HDD	1	
12-18	XTN2+6G	SCREW	2	
12-19	RMR1655-W	REFLECTOR COVER	1	
13	REP3713B	FRONT(R) P.C.B.	1	(RTL)
14	RMC0595	EARTH PLATE	1	
15	RMA1778	FRONT ANGLE	1	
16	XTBS26+10J	SCREW	6	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
17	RHD30113	SCREW	2	
18	RKM0508-S	TOP COVER	1	⚠
19	VHD0690	SCREW	3	
20	VXY1814	RAM DRIVE UNIT	1	(RTL)
21	RFKV0031HDK	HDD 120GB	1	
22	VEK0G75	FFC(42P)	1	
23	VEE0Z41	WIRE WITH CONNECTOR	1	
24	RMA1835	HDD HOLDER	1	
25	RMZ0747	INSULATED SHEET	1	
26	RMA1834	HDD BRACKET	1	
27	RXQ1208	SUPER SHEET UNIT	1	
28	K1MZ40Z00002	HDD CONNECTOR	1	
30	REP3763A	IR P.C.B.	1	(RTL)
31	VWJ1731	FFC(42P)	1	
32	RMR1656-W	LED COVER	1	
33	RMV0282	BARRIER	1	
A1	EUR7721KG0	REMOTE CONTROL ASS'Y	1	
A1-1	UR77EC2003A	BATTERY COVER	1	
A2	K2KA6CA00001	AV CORD	1	
A3	K2CB2CB00006	AC CORD	1	⚠
A4	VJA1125	RF COAXIAL CABLE	1	K2KZ2BA00001
A5	RPQF0250	ACCESSORY CASE	1	
A6	RQF5607	FAN BAG ASS'Y	1	(P) ⚠
A6	RQF5608	FAN BAG ASS'Y	1	(PC) ⚠
A6-1	RQT7398-C	OPERATING INSTRUCTIONS	1	<IA>(PC) ⚠
A6-1	RQT7305-P	OPERATING INSTRUCTIONS	1	<IB>(P) ⚠
A6-2	RQCB0833	CCP SHEET	1	(P)
A6-3	RQCA1004	DISC CAUTION SHEET	1	
A6-4	RPF0378	POLYETHYLENE BAG(F.B.)	1	
A6-5	RQCC2431	DVD MEDIA SHEET	1	(P)
A6-6	RQCA1119	HDD CAUTION SHEET	1	
A6-7	RQCA1253	EPG SETTING SHEET	1	
A6-7	RQCA1254	EPG SETTING SHEET	1	(PC)
A7	RPQ1594	PAD	1	
A8	K2ZZ04C00001	IR BLUSTER	1	
PC1	RPG7127	PACKING CASE	1	(P)
PC1	RPG7128	PACKING CASE	1	(PC)
PC2	RPN1706A	CUSHION(A)	1	
PC3	RPN1706B	CUSHION(B)	1	
PC4	VPF0505	POLYETHYLENE BAG(UNIT)	1	
■	02	REP3774G/RFKBE85HPC		(DIGITAL P.C.B.)
C3401	ECJ1VB0J105K	6.3V 1U	1	
C3402	ECJ0EC1H220J	50V 22P	1	
C3403	ECJ0EB1A104K	10V 0.1U	1	
C3404,05	ECJ0EC1H220J	50V 22P	2	
C3406	ECJ0EB1A104K	10V 0.1U	1	
C3407,08	ECJ0EC1H100D	50V 10P	2	
C3410	ECJ0EB1C103K	16V 0.01U	1	

[redacted]	[redacted]	[redacted]	[redacted]	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3411	ECST0JX476R	6.3V 47U	1	
C3413	ECJ0EB1A104K	10V 0.1U	1	
C3417-19	ECJ1VB0J105K	6.3V 1U	3	
C3420	ECJ0EB1C103K	16V 0.01U	1	
C3421	ECJ0EB1A104K	10V 0.1U	1	
C3422	ECJ0EB1C103K	16V 0.01U	1	
C3423-28	ECJ0EB1A104K	10V 0.1U	6	
C3429,30	ECJ2FB0J106K	6.3V 10U	2	F1J0J106A013
C3431	ECJ0EB1A104K	10V 0.1U	1	
C3432	ECJ1VB0J105K	6.3V 1U	1	
C3433	ECJ0EB1A104K	10V 0.1U	1	
C3435,36	ECJ0EB1A104K	10V 0.1U	2	
C3440	EEEHB0J101P	6.3V 100P	1	
C3441	ECJ0EB1A104K	10V 0.1U	1	
C3502	ECJ0EB1C103K	16V 0.01U	1	
C4411	ECST1AY106R	10V 10U	1	
C4412	EEEHB0J470R	6.3V 47P	1	
C4413	EEEHB0J101P	6.3V 100P	1	
C4414,15	ECJ0EF1C104Z	16V 0.1U	2	
C4416	F2H0J331A016	6.3V 330U	1	
C4417	ECJ0EF1C104Z	16V 0.1U	1	
C4418	EEEHB0J101P	6.3V 100P	1	
C4421-26	ECJ0EB1E102K	25V 1000P	6	
C4427	EEEHB0J470R	6.3V 47P	1	
C4428	ECJ0EF1C104Z	16V 0.1U	1	
C4429	ECJ0EB1A104K	10V 0.1U	1	
C4430	ECST1AY106R	10V 10U	1	
C4431,32	ECJ0EF1C104Z	16V 0.1U	2	
C4433	EEEHB1C100R	16V 10P	1	
C4434	ECJ0EF1C104Z	16V 0.1U	1	
C6001	ECJ0EF1C104Z	16V 0.1U	1	
C6002	ECJ2FB0J106K	6.3V 10U	1	F1J0J106A013
C6003	ECJ0EB1C103K	16V 0.01U	1	
C9001,02	ECJ0EC1H470J	50V 47P	2	
C50001	ECJ1VB0J105K	6.3V 1U	1	
C50002	F1K0J226A004	6.3V 22U	1	
C50004,05	ECJ0EB1A104K	10V 0.1U	2	
D3401,02	MA3S132E0L	DIODE	2	
D4401	MA3Z142K0LG	DIODE	1	
FL3401,02	F1H0J4740004	FILTER	2	
FL3404	F1H0J4740004	FILTER	1	
FL3406,07	F1H0J4740004	FILTER	2	
FL3409-12	F1H0J4740004	FILTER	4	
FL3414-26	F1H0J4740004	FILTER	13	
FL3429	F1H0J4740004	FILTER	1	
FL3431	F1H0J4740004	FILTER	1	
FL3433-35	F1H0J4740004	FILTER	3	
FL3501,02	F1H0J4740004	FILTER	2	
FL3505-16	F1H0J4740004	FILTER	12	
FL4403-05	F1H0J4740004	FILTER	3	
FL6001-18	F1H0J4740004	FILTER	18	
FL6020-23	F1H0J4740004	FILTER	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
FL6701-03	F1H0J4740004	FILTER	3	
FL50001-06	F1H0J4740004	FILTER	6	
FP3501	K1MN40A00022	CONNECTOR(40P)	1	
IC3401	AN13310B-VB	IC	1	
IC3402	C3ABMG000092	IC	1	
IC3404	MN85573R	IC	1	
IC3406	C1DB00001110	IC	1	
IC3408	C3ABPJ000048	IC	1	
IC3409	C0DBZGC00066	IC	1	
IC3501	MN88302R	IC	1	
IC3502	C3ABRG000036	IC	1	
IC4404	C0FBBK000035	IC	1	
IC4406	C0FBAK000008	IC	1	
IC4407	C0JBAA000257	IC	1	
IC4408	C0JBAD000107	IC	1	
IC4409	C0CBCBD00002	IC	1	
IC6001	MN2DS0011-HR	IC	1	
IC6002	C0EBE0000130	IC	1	
IC6003	C3CBLD000091	IC	1	
IC6004	74LVC244APWL	IC	1	C0JBAZ001466
IC6005,06	C3ABRG000036	IC	2	
IC6701	C1ZBZ0002433	IC	1	
IC6703	REP3774G	DIGITAL P.C.B.	1	(P)
IC6703	RFKBE85HPC	DIGITAL P.C.B.	1	(PC)
IC50001,02	C3ABPG000133	IC	2	
LB3404,05	J0JHC0000032	COIL	2	
LB3408,09	J0JHC0000032	COIL	2	
LB4401-04	J0JGC0000020	COIL	4	
LB4405	J0JHC0000032	COIL	1	
LB6001-04	J0JHC0000032	COIL	4	
LB9001,02	J0JHC0000032	COIL	2	
LB9006,07	J0JCC0000103	COIL	2	
LB9008	J0JHC0000045	COIL	1	
LB9009	J0JHC0000046	COIL	1	
LB50001-05	J0JHC0000032	COIL	5	
P6002	K1KA06A00394	CONNECTOR(6P)	1	
P9001	K1KB88A00002	CONNECTOR(88P)	1	
Q6001,02	B1ABCF000114	TRANSISTOR	2	
Q6701-05	B1ABCF000114	TRANSISTOR	5	
Q50001-05	B1ADCF000081	TRANSISTOR	5	
QR3502,03	UN5213TX	TRANSISTOR	2	UNR521300L
R3405	ERJ2GEJ103	1/16W 10K	1	
R3407	ERJ2GE0R00X	1/16W 0	1	
R3409	ERJ2GE0R00X	1/16W 0	1	
R3410,11	ERJ2GEJ101	1/16W 100	2	
R3412	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X
R3414	ERJ2GEJ330X	1/16W 33	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3416	ERJ2GEJ472X	1/16W 4.7K	1	ERJ2RMJ472X
R3417,18	ERJ2GEJ103	1/16W 10K	2	
R3419-23	ERJ2GEJ220X	1/16W 22	5	ERJ2RMJ220X
R3427	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X
R3430	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X
R3432-34	ERJ2GEJ220X	1/16W 22	3	ERJ2RMJ220X
R3436	ERJ2GEJ470	1/16W 47	1	
R3440	ERJ2GEJ103	1/16W 10K	1	
R3442	ERJ2GEJ103	1/16W 10K	1	
R3443-45	ERJ2GE0R00X	1/16W 0	3	
R3447	ERJ2RHD682	1/16W 6.8K	1	
R3448	ERJ2GEJ562X	1/16W 5.6K	1	
R3449	ERJ2RHD682	1/16W 6.8K	1	
R3450	ERJ2GEJ104	1/16W 100K	1	
R3451	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X
R3452	ERJ2GE0R00X	1/16W 0	1	
R3453	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X
R3454	ERJ2GEJ390X	1/16W 39	1	ERJ2RMJ390X
R3455	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X
R3456	ERJ2GEJ470	1/16W 47	1	
R3457	ERJ2GE0R00X	1/16W 0	1	
R3458	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X
R3460-62	ERJ2GEJ470	1/16W 47	3	
R3463,64	ERJ2GE0R00X	1/16W 0	2	
R3472,73	ERJ2GEJ220X	1/16W 22	2	ERJ2RMJ220X
R3476	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R3501-03	ERJ2GEJ220X	1/16W 22	3	ERJ2RMJ220X
R3509	ERJ2GEJ330X	1/16W 33	1	
R3510,11	ERJ2GEJ103	1/16W 10K	2	
R3514	ERJ2GEJ105	1/16W 1M	1	
R3519-22	ERJ2GEJ330X	1/16W 33	4	
R3523	ERJ2GEJ103	1/16W 10K	1	
R3524	ERJ2GEJ330X	1/16W 33	1	
R3525	ERJ2GEJ103	1/16W 10K	1	
R3526-28	ERJ2GEJ220X	1/16W 22	3	ERJ2RMJ220X
R3530	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R3531	ERJ2GEJ820X	1/16W 82	1	
R3532	ERJ2GEJ472X	1/16W 4.7K	1	ERJ2RMJ472X
R3533	ERJ2GEJ101	1/16W 100	1	
R3535	ERJ2GEJ820X	1/16W 82	1	
R3537	ERJ2GEJ562X	1/16W 5.6K	1	
R3541,42	ERJ2GEJ103	1/16W 10K	2	
R3543	ERJ2GE0R00X	1/16W 0	1	
R3548	ERJ2GEJ330X	1/16W 33	1	
R4418-27	ERJ2GE0R00X	1/16W 0	10	
R4428	ERJ3GEY0R00V	1/10W 0	1	
R4433-35	ERJ3GEY0R00V	1/10W 0	3	
R4436	ERJ2GEJ221	1/16W 220	1	
R4437-39	ERJ2GE0R00X	1/16W 0	3	
R4450-52	ERJ2GE0R00X	1/16W 0	3	
R4453	ERJ2GEJ562X	1/16W 5.6K	1	
R4454-57	ERJ2GE0R00X	1/16W 0	4	
R6001	ERJ2GEJ333X	1/16W 33K	1	ERJ2RMJ333X
R6002	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6003	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R6004	ERJ2GEJ472X	1/16W 4.7K	1	ERJ2RMJ472X
R6005	ERJ2GEJ103	1/16W 10K	1	
R6006	ERJ2GEJ153	1/16W 15K	1	
R6007	ERJ2GEJ472X	1/16W 4.7K	1	ERJ2RMJ472X
R6008	ERJ2GEJ103	1/16W 10K	1	
R6009,10	ERJ2GEJ330X	1/16W 33	2	
R6011	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X
R6013	ERJ2GEJ103	1/16W 10K	1	
R6014-17	ERJ2GEJ104	1/16W 100K	4	
R6018,19	ERJ2GEJ220X	1/16W 22	2	ERJ2RMJ220X
R6020	ERJ2GE0R00X	1/16W 0	1	
R6021,22	ERJ2GEJ470	1/16W 47	2	
R6023	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X
R6025	ERJ2GEJ103	1/16W 10K	1	
R6028	ERJ2GEJ470	1/16W 47	1	
R6029	ERJ2GEJ103	1/16W 10K	1	
R6031	ERJ2GEJ470	1/16W 47	1	
R6035	ERJ2GEJ470	1/16W 47	1	
R6036	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X
R6037	ERJ2GEJ333X	1/16W 33K	1	ERJ2RMJ333X
R6039	ERJ2GEJ103	1/16W 10K	1	
R6040	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X
R6701	ERJ2GEJ104	1/16W 100K	1	
R6703	ERJ2GEJ103	1/16W 10K	1	
R6706,07	ERJ2GEJ470	1/16W 47	2	
R6709,10	ERJ2GEJ332X	1/16W 3.3K	2	ERJ2RMJ332X
R6711,12	ERJ2GEJ470	1/16W 47	2	
R6713	ERJ2GEJ103	1/16W 10K	1	
R6714	ERJ2GEJ333X	1/16W 33K	1	ERJ2RMJ333X
R6715	ERJ2GEJ470	1/16W 47	1	
R6716,17	ERJ2GEJ333X	1/16W 33K	2	ERJ2RMJ333X
R6718	ERJ2GE0R00X	1/16W 0	1	
R6720-28	ERJ2GEJ470	1/16W 47	9	
R6729	ERJ2GEJ104	1/16W 100K	1	
R6730	ERJ2GEJ103	1/16W 10K	1	
R6731	ERJ2GEJ222X	1/16W 22K	1	ERJ2RMJ222X
R6733	ERJ2GEJ103	1/16W 10K	1	
R6735	ERJ2GEJ472X	1/16W 4.7K	1	ERJ2RMJ472X
R6737,38	ERJ2GEJ470	1/16W 47	2	
R6739	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R6750,51	ERJ2GEJ470	1/16W 47	2	
R6752	ERJ2GEJ101	1/16W 100	1	
R6753-56	ERJ2GEJ470	1/16W 47	4	
R50001	ERJ2GEJ390X	1/16W 39	1	ERJ2RMJ390X
R50002	ERJ2GE0R00X	1/16W 0	1	
R50003	ERJ2GEJ390X	1/16W 39	1	ERJ2RMJ390X
R50004	ERJ2GE0R00X	1/16W 0	1	
R50005	ERJ2GEJ330X	1/16W 33	1	
R50006,07	ERJ2GEJ470	1/16W 47	2	
R50008	ERJ2GEJ100	1/16W 10	1	
R50009	ERJ2GEJ103	1/16W 10K	1	
R50010	ERJ2RHD332	1/16W 3.3K	1	
R50011	ERJ2RHD223X	1/16W 22K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R50012,13	ERJ2GE0R00X	1/16W 0	2	
R50015	ERJ2RHD333	1/16W 33K	1	
R50016	ERJ2RHD152	1/16W 1.5K	1	
R50017	ERJ2RHD153	1/16W 15K	1	
R50018	ERJ3RBD151	1/16W 150	1	
R50019	ERJ2GEJ330X	1/16W 33	1	
R50020	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R50021	ERJ3RED820	1/16W 82	1	
R50022	ERJ2GEJ330X	1/16W 33	1	
R50023	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R50024	ERJ3RED820	1/16W 82	1	
R50025	ERJ2GEJ330X	1/16W 33	1	
R50026	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R50027	ERJ3RBD151	1/16W 150	1	
R50028	ERJ2GEJ330X	1/16W 33	1	
R50029	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R50030	ERJ3RED330	1/16W 33	1	
R50031	ERJ3RBD151	1/16W 150	1	
R50032	ERJ2GEJ330X	1/16W 33	1	
R50033	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X
R50034,35	ERJ3RED220	1/16W 22	2	
R50036-38	ERJ2GEJ470	1/16W 47	3	
R50039	ERJ2GEJ820X	1/16W 82	1	
RX3401-17	D1H82204A024	RESISTOR-RESISTOR	17	
RX3421,22	D1H82204A024	RESISTOR-RESISTOR	2	
RX3433-44	D1H82204A024	RESISTOR-RESISTOR	12	
RX3501-04	D1H82204A024	RESISTOR-RESISTOR	4	
RX3505-08	D1H83304A024	RESISTOR-RESISTOR	4	
RX3515-19	D1H83304A024	RESISTOR-RESISTOR	5	
RX3520-26	D1H82204A024	RESISTOR-RESISTOR	7	
RX3527-32	D1H81034A024	RESISTOR-RESISTOR	6	
RX3538-40	D1H84734A024	RESISTOR-RESISTOR	3	
RX6001	D1H81034A024	RESISTOR-RESISTOR	1	
RX6002-04	D1H84704A024	RESISTOR-RESISTOR	3	
RX6005,06	D1H83304A024	RESISTOR-RESISTOR	2	
RX6007	D1H84704A024	RESISTOR-RESISTOR	1	
RX6009-26	D1H83304A024	RESISTOR-RESISTOR	18	
RX6027-32	D1H84704A024	RESISTOR-RESISTOR	6	
RX6033,34	D1H83324A013	RESISTOR-RESISTOR	2	
RX6035,36	D1H83334A024	RESISTOR-RESISTOR	2	
RX6037	D1H81034A024	RESISTOR-RESISTOR	1	
RX6038	D1H83304A024	RESISTOR-RESISTOR	1	
RX6039-42	D1H84704A024	RESISTOR-RESISTOR	4	
RX6043	D1H81034A024	RESISTOR-RESISTOR	1	
RX6044	D1H83334A024	RESISTOR-RESISTOR	1	
RX6701,02	D1H81034A024	RESISTOR-RESISTOR	2	
RX6703-06	D1H84704A024	RESISTOR-RESISTOR	4	
RX6708	D1H84704A024	RESISTOR-RESISTOR	1	
RX6711-13	D1H83324A013	RESISTOR-RESISTOR	3	
RX6716	D1H84704A024	RESISTOR-RESISTOR	1	
RX6717-19	D1H83334A024	RESISTOR-RESISTOR	3	
RX6720-23	D1H83324A013	RESISTOR-RESISTOR	4	
RX6724	D1H84704A024	RESISTOR-RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
RX6726-28	D1H84704A024	RESISTOR-RESISTOR	3	
RX6729,30	D1H81034A024	RESISTOR-RESISTOR	2	
RX6731-34	D1H84704A024	RESISTOR-RESISTOR	4	
RX6735	D1H82224A024	RESISTOR-RESISTOR	1	
RX6736	D1H81034A024	RESISTOR-RESISTOR	1	
RX6737	D1H84724A024	RESISTOR-RESISTOR	1	
RX6738	D1H83334A024	RESISTOR-RESISTOR	1	
RX50001-16	D1H84704A024	RESISTOR-RESISTOR	16	
X3401	H0J270500069	CRYSTAL OSCILLATOR	1	
X3501	H2D330500001	CRYSTAL OSCILLATOR	1	
■	03	REP3662F		(MAIN P.C.B.)
B7501	CR2354-1GUF	LITHIUM BATTERY	1	
C1503	ECJ1VB1A105K	10V 1U	1	F1H1A105A028
C1505	F2A1A470A388	10V 47U	1	
C1512	ECJ1VB0J105K	6.3V 1U	1	
C1513	ECJ1VB1A105K	10V 1U	1	F1H1A105A028
C1514	ECJ1VB0J105K	6.3V 1U	1	
C1515	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C1516	ECJ1VB1A105K	10V 1U	1	F1H1A105A028
C1518	F2A1A470A388	10V 47U	1	
C1519	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C1520	ECJ1VB1A105K	10V 1U	1	F1H1A105A028
C1521	ECJ1VB0J105K	6.3V 1U	1	
C1522	ECJ1VC1H331J	50V 330P	1	
C1523	ECJ1VB1A105K	10V 1U	1	F1H1A105A028
C1524	F2A1A470A388	10V 47U	1	
C1527,28	ECJ1VB0J105K	6.3V 1U	2	
C1531	F2A1A470A388	10V 47U	1	
C1533,34	ECJ1VB0J105K	6.3V 1U	2	
C1537	EEUFC1E101S	25V 100U	1	
C1539	F2A0J102A256	6.3V 1000U	1	
C1540	F2A1E4700048	25V 47U	1	
C1541	F2A1A471A211	10V 470U	1	
C1543	F2A1E221A210	25V 220U	1	
C3001	ECJ1VC1H561J	50V 560P	1	
C3005	ECJ1VB1C333K	16V 0.033U	1	
C3006-08	ECJ1XB1C104K	16V 0.1U	3	ECJ1VB1C104K
C3010-17	ECJ1VB1H103K	50V 0.01U	8	
C3018	F2A1E4700048	25V 47U	1	
C3019-21	ECJ1VB1H103K	50V 0.01U	3	
C3022	F2A0J1020045	6.3V 1000U	1	
C3023	F2A1A1010072	10V 100U	1	
C3024	F2A0J1020045	6.3V 1000U	1	
C3025	F2A1A1010072	10V 100U	1	
C3026	F2A0J1020045	6.3V 1000U	1	
C3027,28	F2A1A1010072	10V 100U	2	
C3029	F2A0J1020045	6.3V 1000U	1	
C3030	F2A1A1010072	10V 100U	1	
C3031	F2A0J1020045	6.3V 1000U	1	
C3032,33	ECJ1VB0J105K	6.3V 1U	2	

[illegible]	[illegible]	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3034	ECJ1VB1H103K	50V 0.01U	1	
C3035,36	F2A1H2200032	50V 22U	2	
C3037	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C3038	F2J1C4700005	16V 47U	1	
C3039	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C3040	ECJ1VB1H103K	50V 0.01U	1	
C3041	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C3042	F2J1C4700005	16V 47U	1	
C3043	ECJ1VB1H103K	50V 0.01U	1	
C3044	F2A1E4700048	25V 47U	1	
C3046,47	ECJ1VB1H103K	50V 0.01U	2	
C3901	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C3902	ECJ1VB1H103K	50V 0.01U	1	
C3909	ECJ1VB1H103K	50V 0.01U	1	
C3910,11	ECJ1XB1C104K	16V 0.1U	2	ECJ1VB1C104K
C3912	ECJ1VB1H103K	50V 0.01U	1	
C3917,18	ECJ1VB1H103K	50V 0.01U	2	
C4003-06	F2A1H1R0A494	50V 1U	4	
C4009,10	ECJ1VF1C104Z	16V 0.1U	2	
C4011	ECJ2VB1E104K	25V 0.1U	1	
C4013,14	F2A1H1R0A494	50V 1U	2	
C4016	F2A1C221A497	16V 220U	1	
C4017	ECJ1XC1H820J	50V 82P	1	ECJ1VC1H820J
C4019	ECJ1XC1H820J	50V 82P	1	ECJ1VC1H820J
C4022	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C4023	F2A1C471A498	16V 470U	1	
C4024,25	F2A1C470A494	16V 47U	2	
C4026,27	F2A1H1R0A494	50V 1U	2	
C4028,29	F2A1C100A494	16V 10U	2	
C4036	F2A1C470A494	16V 47U	1	
C4037	F2A1C221A497	16V 220U	1	
C4038	F2A1C470A494	16V 47U	1	
C4039-42	ECJ2VC1H102J	50V 1000P	4	
C4045,46	ECJ1VF1C104Z	16V 0.1U	2	
C4047	ECQV1H104JL	50V 0.1U	1	
C4049	F2A0J471A497	6.3V 470U	1	
C4050	ECQV1H104JL	50V 0.1U	1	
C4052	F2A1C471A498	16V 470U	1	
C4901	F2A0J470A179	6.3V 47U	1	
C4902	ECJ1VF1C104Z	16V 0.1U	1	
C4903	F2A0J470A179	6.3V 47U	1	
C4904	ECJ1VF1C104Z	16V 0.1U	1	
C4906	ECJ1VC1H220J	50V 22P	1	
C7401	ECJ1VC1H030C	50V 3P	1	
C7404	ECJ1VB1H103K	50V 0.01U	1	
C7405	F2A0J470A012	6.3V 47U	1	
C7406,07	ECJ1XB1C104K	16V 0.1U	2	ECJ1VB1C104K
C7416	ECJ1VB1H103K	50V 0.01U	1	
C7417	F2A1H1R00071	50V 1U	1	
C7432,33	F2A1C100A494	16V 10U	2	
C7436	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C7437	F2A0J470A012	6.3V 47U	1	
C7525	ECJ1VC1H101J	50V 100P	1	
C7526	ECJ1VF1C104Z	16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7528	ECJ1VF1C104Z	16V 0.1U	1	
C7550	ECJ1VB1H103K	50V 0.01U	1	
C7551	F2A1H2200032	50V 22U	1	
C7552	ECJ1VF1H104Z	50V 0.1U	1	
C7555	F2A1E2210050	25V 220U	1	
C7556	ECA1AHG221	10V 220U	1	
C7557	ECQB1H473KF	50V 0.047U	1	
C7558	F2A1H5600009	50V 56U	1	
C7559	ECQB1H223KF3	50V 0.022U	1	
C7560	F2A1H2200032	50V 22U	1	
C7565	ECJ2YB0J475K	6.3V 4.7U	1	F1J0J475A008
C7566,67	ECJ1XB1C104K	16V 0.1U	2	ECJ1VB1C104K
C7569	ECJ1VF1C104Z	16V 0.1U	1	
C7580-83	ECJ1VC1H101J	50V 100P	4	
C7584,85	ECJ1VC1H180J	50V 18P	2	
C7586	ECJ1VC1H220J	50V 22P	1	
C7587	ECJ1VC1H150J	50V 15P	1	
C7588	ECJ2YB0J475K	6.3V 4.7U	1	F1J0J475A008
C7589	ECJ1VF1C104Z	16V 0.1U	1	
C7595	ECJ1VF1C104Z	16V 0.1U	1	
C7596	ECJ1VC1H470J	50V 47P	1	
C7597	ECJ1VB1H103K	50V 0.01U	1	
C7598	ECJ1VC1H470J	50V 47P	1	
C7599	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C7600	ECJ1VC1H470J	50V 47P	1	
C7601	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C7602	ECJ1VB1H103K	50V 0.01U	1	
C7604	ECJ1VF1C104Z	16V 0.1U	1	
C7607	ECJ1VF1C104Z	16V 0.1U	1	
C7609,10	ECJ1VC1H100C	50V 10P	2	
C7611-13	ECJ1VB1H103K	50V 0.01U	3	
C7618	ECJ1VB1H103K	50V 0.01U	1	
C7620	ECJ1VB1H103K	50V 0.01U	1	
C7626	ECJ1VB1H103K	50V 0.01U	1	
C7633	F2A0J471A280	6.3V 470U	1	
C7636	ECJ1VF1A105Z	10V 1U	1	
C7637	ECJ1VB1H103K	50V 0.01U	1	
C7639	ECJ1VF1C104Z	16V 0.1U	1	
C7650	ECJ1VB1H103K	50V 0.01U	1	
C7652	ECJ1VF1A105Z	10V 1U	1	
C7653	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C7654	ECJ1VB1H103K	50V 0.01U	1	
C7657	ECJ1VF1H104Z	50V 0.1U	1	
D1501	MA165TA5	DIODE	1	MA2C165001VT
D4001,02	MA3Z142D0RG	DIODE	2	MA3Z142D0LG
D7401	MA4300N-M	DIODE	1	MAZ4300NM
D7501	MAZ4240NMF	DIODE	1	
D7502	B0AAGM000003	DIODE	1	B0AAGM000007
D7503	VSD0002	DIODE	1	B0HAGR000005
D7504,05	MA2C18500E	DIODE	2	
D7506	MAZ4300NLF	DIODE	1	
D7507	B0JDCE000002	DIODE	1	
D7511	B0JACE000001	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D7512	B3AEA0000049	DIODE	1	
DP7501	A2BD00000074	FL DISPLAY TUBE	1	
IC1502	C0DBAHG00013	IC	1	
IC1505	C0CBCDD00008	IC	1	
IC1506	C0CBCDD00002	IC	1	
IC1507	C0CBCDD00006	IC	1	
IC1508	C0DBEGD00002	IC	1	
IC1509	C0DBEFG00003	IC	1	
IC1510	C0DBEGG00003	IC	1	
IC3001	C1AB00001979	IC	1	
IC4001	C1AB00001920	IC	1	
IC4004	C0CBCDC00026	IC	1	
IC4005	C0CBCDC00027	IC	1	
IC7404	C0BBBB000006	IC	1	
IC7501	C2CBJG000443	IC	1	
IC7502	C0HBB0000033	IC	1	
IC7503	C0EBJ0000110	IC	1	
IC7505	C0EBE0000194	IC	1	
IC7506	C0ABBA000146	IC	1	
IP7501	ICP-N10T104	IC PROTECTOR	1	B1ZAZ0000035 ⚠
JK3901	K1U822B00003	JACK,L1,L3	1	
JK3902	K1U820B00003	JACK,TV	1	
JK3903	K1U407B00003	JACK,AV OUT,OPTICAL OUT	1	
JK3904	K1U415B00001	JACK,L2	1	
K3001	ERJ3GEY0R00V	1/10W 0	1	
K7401	ERJ3GEY0R00V	1/10W 0	1	
K7403,04	ERJ3GEY0R00V	1/10W 0	2	
K7502	ERJ3GEY0R00V	1/10W 0	1	
K7506-10	ERJ3GEY0R00V	1/10W 0	5	
K7512	ERJ3GEY0R00V	1/10W 0	1	
L1501	G0A220G00018	COIL 22UH	1	
L3001,02	ELEXH220JBV	COIL 22UH	2	
L4901	ELESE220KA	COIL 22UH	1	
L7401	G0A220G00018	COIL 22UH	1	
L7502	ELESE101K	COIL 100UH	1	
LB1501	J0JHC0000032	COIL	1	
LB1503	J0JHC0000032	COIL	1	
LB1504,05	J0JKB0000003	COIL	2	
LB3905-10	J0JCC0000103	COIL	6	
LB3915-20	J0JCC0000103	COIL	6	
LB3924-29	J0JCC0000103	COIL	6	
LB4903-12	J0JCC0000103	COIL	10	
LB7402	J0JHC0000032	COIL	1	
LB7409,10	J0JHC0000032	COIL	2	
LB7411,12	ERJ3GEY0R00V	1/10W 0	2	
LB7413	J0JHC0000032	COIL	1	
LB7501	VLP0175	COIL	1	J0JCC0000060

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB7502	ERJ3GEY0R00V	1/10W 0	1	
LB7503	J0JKB0000037	COIL	1	
LB7504	J0JGC0000020	COIL	1	
LB7505,06	J0JCC0000103	COIL	2	
LB7507,08	ERJ3GEY0R00V	1/10W 0	2	
P1501	K1KA08A00427	CONNECTOR(8P)	1	
P1502	K1KA23A00004	CONNECTOR(23P)	1	
P7402	K1KA88A00002	CONNECTOR(88P)	1	
P7503	K1KA03A00173	CONNECTOR(3P)	1	
P7504	K1KB12B00049	CONNECTOR(12P)	1	
PP7401	VJP3042G008W	CONNECTOR(8P)	1	K1KA08A00163
Q4001	2SB1218A	TRANSISTOR	1	
Q4002-05	2SD132800L	TRANSISTOR	4	
Q7401	2SB1218A	TRANSISTOR	1	
Q7503	2SD1994B	TRANSISTOR	1	
Q7504	2SD0601A	TRANSISTOR	1	
Q7507	2SB0709ARL	TRANSISTOR	1	
Q7508	2SD1819AWL	TRANSISTOR	1	
Q7512	2SD0874A0L	TRANSISTOR	1	
Q7517	2SD132800L	TRANSISTOR	1	
Q7520	2SD0601A	TRANSISTOR	1	
QR4001-04	UN5211	TRANSISTOR	4	UNR5211
QR7502	UN5212TX	TRANSISTOR	1	UNR521200L
QR7507	UN5113TW	TRANSISTOR	1	
R1501	ERJ3GEYJ822V	1/10W 8.2K	1	D0GB822JA002
R1502	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R1503	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R1504	ERDS2FJ271	1/4W 270	1	
R1506	ERDS2FJ271	1/4W 270	1	
R1507	ERJ3RED330	1/16W 33	1	
R1508	ERJ3RBD201	1/16W 200	1	
R1509	ERJ3RBD102V	1/16W 1K	1	
R1510	ERJ3RED220	1/16W 22	1	
R1511	ERJ3RBD182V	1/16W 1.8K	1	
R1512	ERJ3RBD202	1/16W 2K	1	
R1515,16	ERDS2FJ271	1/4W 270	2	
R3025	ERJ3RBD153	1/16W 15K	1	
R3026	ERJ3GEYJ105V	1/10W 1M	1	
R3027	ERJ3GEY0R00V	1/10W 0	1	
R3028	ERJ3GEYJ471V	1/10W 470	1	
R3029	ERJ3GEY0R00V	1/10W 0	1	
R3030	ERJ3EKF75R0	1/10W 75	1	
R3031	ERJ3GEY0R00V	1/10W 0	1	
R3032,33	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R3036	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R3038	ERJ3GEYJ330V	1/10W 33	1	D0GB330JA002
R3039,40	ERJ3GEYJ221V	1/10W 220	2	
R3041	ERJ3RBD104	1/16W 100K	1	
R3901,02	ERJ3EKF75R0	1/10W 75	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3903	ERJ3GEYJ102V	1/10W 1K	1	
R3904,05	ERJ3EKF75R0	1/10W 75	2	
R3906	ERJ3GEYJ102V	1/10W 1K	1	
R3907-14	ERJ3EKF75R0	1/10W 75	8	
R3915,16	ERJ3GEYJ912V	1/10W 9.1K	2	
R3923-25	ERJ3EKF75R0	1/10W 75	3	
R3926	ERJ3GEYJ102V	1/10W 1K	1	
R3927-29	ERJ3EKF75R0	1/10W 75	3	
R4001-04	ERJ3GEYJ104	1/10W 100K	4	
R4008	ERJ3GEY0R00V	1/10W 0	1	
R4011-14	ERJ6GEYJ102V	1/8W 1K	4	
R4015,16	ERJ3GEYJ104	1/10W 100K	2	
R4017-20	ERJ3GEY0R00V	1/10W 0	4	
R4024,25	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R4026	JAR0816P123D	1/16W 12K	1	D0HB123ZA002
R4027	D0HB622ZA002	1/16W 6.2K	1	
R4028	JAR0816P123D	1/16W 12K	1	D0HB123ZA002
R4029	D0HB622ZA002	1/16W 6.2K	1	
R4031,32	ERJ6GEYJ102V	1/8W 1K	2	
R4037,38	ERJ3GEYJ104	1/10W 100K	2	
R4039	ERJ3GEY0R00V	1/10W 0	1	
R4042	ERJ3GEY0R00V	1/10W 0	1	
R4043,44	JAR0816P392D	1/16W 3900	2	D0HB392ZA002
R4045,46	D0HB622ZA002	1/16W 6.2K	2	
R4049-52	ERJ3GEYJ103V	1/10W 10K	4	D0GB103JA002
R4059,60	ERJ3GEYJ473V	1/10W 47K	2	D0GB473JA002
R4061,62	ERJ3GEYJ681V	1/10W 680	2	D0GB681JA002
R4063,64	ERJ3GEYJ272V	1/10W 2.7K	2	
R4065,66	ERJ3GEYJ681V	1/10W 680	2	D0GB681JA002
R4067,68	ERJ3GEYJ272V	1/10W 2.7K	2	
R4069-72	ERJ3GEYJ221V	1/10W 220	4	
R4074,75	ERJ3GEY0R00V	1/10W 0	2	
R4077,78	ERJ3GEY0R00V	1/10W 0	2	
R4082	ERJ3GEY0R00V	1/10W 0	1	
R4901	ERJ3GEY0R00V	1/10W 0	1	
R4903	ERJ3GEY0R00V	1/10W 0	1	
R7403,04	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R7406,07	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R7418,19	ERG2SJ471E	2W 470	2	
R7442	ERJ3RBD222V	1/16W 2.2K	1	
R7443	ERJ3RBD102V	1/16W 1K	1	
R7444	ERJ3RBD153	1/16W 15K	1	
R7445	ERJ3RBD222V	1/16W 2.2K	1	
R7446	ERJ3RBD133V	1/16W 13K	1	
R7452	ERJ3GEYJ681V	1/10W 680	1	D0GB681JA002
R7454	ERJ3GEY0R00V	1/10W 0	1	
R7505	ERJ3RBD273V	1/16W 27K	1	
R7507	ERDS2FJ331	1/4W 330	1	
R7508	ERDS2FJ5R6	1/4W 5.6	1	
R7509	ERJ3GEYJ333V	1/10W 33K	1	D0GB333JA002
R7510	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R7511	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R7512,13	ERJ3GEYJ473V	1/10W 47K	2	D0GB473JA002
R7514	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7516	ERJ3GEY0R00V	1/10W 0	1	
R7519	ERJ3GEYJ102V	1/10W 1K	1	
R7520	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R7521	ERJ3GEYG152	1/10W 1.5K	1	
R7522	ERJ3GEYG562V	1/10W 5.6K	1	
R7523	ERJ3GEYD153V	1/10W 15K	1	D0HB153ZA002
R7530-33	ERJ3GEYJ473V	1/10W 47K	4	D0GB473JA002
R7534-37	ERJ3GEYJ101	1/10W 100	4	D0GB101JA002
R7538	ERJ3GEYJ472V	1/10W 4.7K	1	
R7539	ERJ3GEY0R00V	1/10W 0	1	
R7540	ERJ3GEYD274V	1/10W 270K	1	ERA3YKD274V
R7541	ERJ3GEY0R00V	1/10W 0	1	
R7542	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R7548	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R7549	ERJ3GEYJ511	1/10W 510	1	
R7550,51	ERJ3GEYJ202V	1/10W 2K	2	
R7556,57	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R7561	ERDS2TJ392	1/4W 3.9K	1	
R7562-64	ERJ3GEYJ101	1/10W 100	3	D0GB101JA002
R7569	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R7570	ERJ3GEYJ104	1/10W 100K	1	
R7583,84	ERJ3GEYJ473V	1/10W 47K	2	D0GB473JA002
R7585	ERJ3GEYJ223V	1/10W 22K	1	D0GB223JA002
R7588	ERJ3GEYJ472V	1/10W 4.7K	1	
R7589-91	ERJ3RBD822	1/10W 8.2K	3	
R7595,96	ERJ3GEYJ473V	1/10W 47K	2	D0GB473JA002
R7597	ERJ3GEYD153V	1/10W 15K	1	D0HB153ZA002
R7598	ERJ3GEYJ102V	1/10W 1K	1	
R7599	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R7600,01	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R7602	ERJ3GEYJ821V	1/10W 820	1	
R7603	ERJ3GEYJ183V	1/10W 18K	1	D0GB183JA002
R7604	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R7611	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R7613	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R7617	ERDS2FJ750	1/4W 75	1	
R7626	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R7629	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R7630	ERJ3GEYJ273V	1/10W 27K	1	D0GB273JA002
R7633	ERJ3GEYJ223V	1/10W 22K	1	D0GB223JA002
R7636-38	ERJ3GEYJ101	1/10W 100	3	D0GB101JA002
R7644	ERJ3GEYD153V	1/10W 15K	1	D0HB153ZA002
R7645	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
S7501	K0F111B00044	SWITCH	1	
T7501	ETS13TB119AP	TRANSFORMER	1	
TU7401	ENGD6201DR	TV TUNER	1	⚠
W601-03	ERJ3GEY0R00V	1/10W 0	3	
W604,05	ERJ6GEY0R00V	1/8W 0	2	
W606-10	ERJ3GEY0R00V	1/10W 0	5	
W611	ERJ6GEY0R00V	1/8W 0	1	

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
W612-18	ERJ3GEY0R00V	1/10W 0	7	
W622-24	ERJ3GEY0R00V	1/10W 0	3	
X7501	H0D100500016	CRYSTAL OSCILLATOR	1	
X7502	H0A327200026	OSCILLATOR	1	
ZJ7407,08	VJR0978	EARTH ANGLE	2	K9ZZ00000424
■	04	VEP01950B		(POWER SUPPLY P.C.B.)
C1120	ECQU2A104MLA	0.1U	1	⚠
C1121	ECQU2A223MLC	0.022U	1	⚠
C1125-27	ECKWNA102MEV	1000P	3	⚠
C1143	EETHC2E151HY	250V 150U	1	
C1150	F2A1V5600013	35V 56U	1	
C1152	ECJ2XC1H101J	16V 100P	1	
C1153	ECUM1H183KBX	50V 0.018U	1	
C1154	ECJ2XB1H102K	50V 1000P	1	ECJ2VB1H102K
C1156	ECKW3A472KRP	1KV 4700P	1	
C1200	ECQV1H104JL	50V 0.1U	1	
C1201	ECJ2VB1E473K	25V 0.047U	1	
C1260,61	F2A1A6810017	10V 680U	2	
C1262	ECA1AHG221	10V 220U	1	
C1270,71	F2A1C6810023	16V 680U	2	
C1272,73	F2A1E2210050	25V 220U	2	
C1274	ECJ2VB1E104K	25V 0.1U	1	
C1400	EEUFM1E221	25V 220U	1	
C1401	F1K1C3350002	16V 3.3U	1	
C1402	ECJ2VB1H103K	50V 0.01U	1	
C1403	ECJ2XC1H331J	16V 330P	1	
C1404	ECJ2VB1H472K	50V 4700P	1	
C1405	ECUX1H681JCX	50V 680P	1	ECJ2VC1H681J
C1406	EEUFM1A681	10V 680U	1	
C1407	EEUFM1E221	25V 220U	1	
C1408,09	ECJ2VB1E104K	25V 0.1U	2	
C1410	ECJ2VB1H103K	50V 0.01U	1	
C1411	ECJ2VC1H680J	50V 68P	1	
C1412	ECJ2VB1H472K	50V 4700P	1	
C1413	F2A0J1520007	6.3V 1500U	1	
C1417-19	ECJ2FB0J106K	6.3V 10U	3	F1J0J106A014
C1420	F1K1C106A062	16V 10U	1	
C1421	ECJ2VB1E104K	25V 0.1U	1	
C1422	F1K1C106A062	16V 10U	1	
C1423	ECJ2FB0J106K	6.3V 10U	1	F1J0J106A014
C1501	EEUFM1C471L	16V 470U	1	
C1503	ECJ2VB1E104K	25V 0.1U	1	
C1504	ECJ2XC1H221J	50V 220P	1	ECJ2VC1H221J
C1505	ECJ2VB1E104K	25V 0.1U	1	
C1506	ECJ2XB1H102K	50V 1000P	1	ECJ2VB1H102K
C1507	ECJ2VB1E473K	25V 0.047U	1	
C1508	ECJ2XB1H102K	50V 1000P	1	ECJ2VB1H102K
C1509	ECJ2VB1H223K	50V 0.023U	1	
C1510	ECJ2VB1E104K	25V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1512	ECJ2VB1H103K	50V 0.01U	1	
C1513	F2A1A4710038	10V 470U	1	
C1514	ECJ2VB1H103K	50V 0.01U	1	
C1570	EEUFM1A102	10V 1000U	1	
D1110	ERZVGAD471	VARISTOR	1	⚠
D1140	B0EDKT000002	DIODE	1	
D1151	B0HAGM000006	DIODE	1	
D1152	MAZ4091NMF	DIODE	1	
D1153	MAZ4270NMF	DIODE	1	
D1155	MAZ73000BC	DIODE	1	
D1156	MA2J11100L	DIODE	1	
D1261	B0JAQE000004	DIODE	1	
D1262,63	B0JAME000025	DIODE	2	⚠
D1271	B0JAQG000005	DIODE	1	
D1400,01	MA2Q73800L	DIODE	2	
D1402	ERA15-02	DIODE	1	B0EAKM000016
D1500	MA2Q73800L	DIODE	1	
D1501	MA2J11100L	DIODE	1	
F1101	K5D162BK0005	FUSE	1	⚠
IC1150	C0DACZH00004	IC	1	
IC1200	C0DAAMA00002	IC	1	
IC1270	C0DAZJH00003	IC	1	
IC1400	C0DAAJG00007	IC	1	
IC1401	C0DBAKG00005	IC	1	
IC1500	C0DBAZH00012	IC	1	
IC1501	C0EBJ0000143	IC	1	
IP1400	K5H2022A0013	IC PROTECTOR	1	⚠
IP1401	K5H3022A0013	IC PROTECTOR	1	⚠
IP1500	K5H3022A0013	IC PROTECTOR	1	⚠
L1120,21	G0B100E00002	COIL 10UH	2	⚠
L1260	G0A100H00014	COIL 10UH	1	
L1270	G0A100H00014	COIL 10UH	1	
L1400	G0A220G00018	COIL 22UH	1	
L1401	G0A330G00010	COIL 33UH	1	
L1402	G0A330ZA0030	COIL 33UH	1	
L1501	G0A220ZA0030	COIL 22UH	1	
L1503	G0A100H00014	COIL 10UH	1	
LB1123	J0JKB0000003	COIL	1	
LB1126	J0JHC0000012	COIL	1	
LB1400	J0JHC0000012	COIL	1	
LB1500	J0JHC0000012	COIL	1	
P1101	K2AB2H000004	AC INLET	1	⚠
P1102	K1KB23A00002	CONNECTOR(FEMALE) 23P	1	
P1103	K1KA04A00192	CONNECTOR(4P)	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q1200	PC123ZY2	TRANSISTOR	1	B3PBA0000078 ⚠
Q1400	B1DHDD000022	TRANSISTOR	1	
QR1300,01	UNR221300L	TRANSISTOR	2	
QR1303,04	UNR221300L	TRANSISTOR	2	
QR1307,08	UNR221300L	TRANSISTOR	2	
R1120	ERDS1TJ474	1W 470K	1	
R1150	ERDS2FJ6R8	1/4W 6.8	1	
R1151	ERDS2FJ223	1/4W 22K	1	
R1152	ERDS2FJ103	1/4W 10K	1	
R1154	ERJ6RBD112	1/10W 1.1K	1	
R1156	ER0S2CHF1802	1/4W 18K	1	
R1157	ERJ6RED470	1/10W 47	1	
R1200	ERJ6GEYF473	1/8W 47K	1	
R1201	ERJ6ENF3001V	1/8W 3K	1	
R1203,04	ERJ6GEYG912	1/8W 9.1K	2	
R1205	ERJ6GEYF473	1/8W 47K	1	
R1206	ERJ6GEYG242	1/8W 2.4K	1	
R1207	ERJ6GEYJ103V	1/8W 10K	1	
R1208	ERJ6GEYG241	1/8W 240	1	
R1209	ERJ6GEYJ102V	1/8W 1K	1	
R1210	ERJ6GEYG103V	1/8W 47K	1	D0GD103GA005
R1270	ERJ6GEYJ472V	1/8W 4.7K	1	
R1310	ERJ6GEY0R00V	1/8W 0	1	
R1313	ERJ6GEYJ103V	1/8W 10K	1	
R1401	ERJ6GEYJ104V	1/8W 100K	1	
R1402	ERJ6RBD302	1/10W 3K	1	
R1404	ERJ6RBD102	1/10W 1K	1	
R1405	ERJ6GEYJ513V	1/8W 51K	1	
R1406	D1BFR039A010	1/10W 39	1	
R1407	ERJ6GEY0R00V	1/8W 0	1	
R1409	ERJ6RBD123	1/10W 12K	1	
R1410	ERJ6ENF3300	1/8W 3.3K	1	ERJ6RBD331V
R1411	ERJ6RBD822V	1/10W 8.2K	1	
R1500	ERJ6GEYJ470V	1/8W 47	1	
R1501	ERJ6RED394	1/10W 390K	1	
R1502	ERJ6GEYJ474V	1/8W 470K	1	
R1503	ERJ6ENF3303	1/8W 330K	1	
R1504	ERJ6RBD163	1/10W 16K	1	
R1505	ERJ6GEYJ3R3V	1/8W 3.3	1	D0GD3R3JA003
R1508-10	D1BDR1800001	1/10W 18	3	
R1513	ERJ6GEYJ103V	1/8W 10K	1	
R1514,15	ERJ6RBD102	1/10W 1K	2	
R1516	ERJ6RED470	1/10W 47	1	
R1517	ERJ6RBD103V	1/10W 10K	1	
R1518	ERJ6GEYF473	1/8W 47K	1	
T1151	G4D2A0000179	TRANSFORMER	1	⚠
W501	ERJ6GEY0R00V	1/8W 0	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
ZA1103,04	K3GD9BB00001	FUSE HOLDER	2	
ZA1105-07	VJR0978	EARTH ANGLE	3	K9ZZ00000424
ZA1150	VSC5606	HEAT CINK	1	
ZA1151	XTN3+8G	SCREW	1	
■	05	REP3763A		(IR P.C.B.)
C8001,02	ECJ1VC1H120J	50V 12P	2	
C8003	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
C8004	ECJ1VC1H101J	50V 100P	1	
C8005	EEEHB0J470R	6.3V 47P	1	
C8006-08	ECJ1XB1C104K	16V 0.1U	3	ECJ1VB1C104K
C8010	ECJ1VC1H101J	50V 100P	1	
C8012	ECJ1XB1C104K	16V 0.1U	1	ECJ1VB1C104K
IC8001	C2CBJH000144	IC	1	
IC8002	C0EBJ0000319	IC	1	
JK8001	K2HC104B0028	JACK	1	
LB8001	J0JHC0000032	COIL	1	
P8001	VJS3042F008W	CONNECTOR(8P)	1	K1KB08B00028
Q8001-03	2SD0601A	TRANSISTOR	3	
Q8004	2SD132800L	TRANSISTOR	1	
Q8005	2SB071000L	TRANSISTOR	1	
R8001	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R8002-05	ERJ3GEYJ101	1/10W 100	4	D0GB101JA002
R8006	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R8009	ERJ3GEYD274V	1/10W 270K	1	ERA3YKD274V
R8010	ERJ3GEYJ752V	1/10W 7.5K	1	
R8012	ERJ3GEYJ102V	1/10W 1K	1	
R8013	ERJ3GEYJ472V	1/10W 4.7K	1	
R8016	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R8017	ERJ6GEYJ241V	1/8W 240	1	
R8018	ERJ3GEYJ220V	1/10W 22	1	
R8019	ERJ3GEYJ752V	1/10W 7.5K	1	
R8021	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R8023	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R8024	ERJ3GEYJ752V	1/10W 7.5K	1	
R8028	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R8029	ERJ6GEYJ241V	1/8W 240	1	
R8030,31	ERJ3GEYJ221V	1/10W 220	2	
R8035	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R8036	ERJ3GEY0R00V	1/10W 0	1	
R8041	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
X8001	H0J160500027	OSCILLATOR	1	
ZJ8001	VMC1359	EARTH SPRING	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	06	REP3713B		(FRONT(R) P.C.B.)
C7801	ECJ1VF1A105Z	10V 1U	1	
D7801	SLR-325MG	DIODE	1	B3ABA0000109
D7804,05	SLR-325MG	DIODE	2	B3ABA0000109
D7806	B3ACA0000252	DIODE	1	
IR7801	B3RAD0000071	REMOTE SENSOR	1	
K7801,02	ERJ3GEY0R00V	1/10W 0	2	
P7801	K1KA12B00136	CONNECTOR(12P)	1	
QR7801	UN2214	TRANSISTOR	1	UNR2214
QR7804-06	UN2214	TRANSISTOR	3	UNR2214
R7801	ERDS2FJ330	1/4W 33	1	
R7802	ERJ3GEYJ221V	1/10W 220	1	
R7805,06	ERJ3GEYJ221V	1/10W 220	2	
R7807	ERJ3GEYJ391V	1/10W 390	1	
R7809	ERJ3RBD272	1/16W 2.7K	1	
R7817	ERJ3RBD272	1/16W 2.7K	1	
R7818	ERJ3RBD222V	1/16W 2.2K	1	
R7819	ERA3YED332	1/16W 3.3K	1	
R7825	ERJ3RBD272	1/16W 2.7K	1	
R7826	ERJ3RBD222V	1/16W 2.2K	1	
R7827	ERA3YED332	1/16W 3.3K	1	
R7828	ERJ3RBD562V	1/16W 5.6K	1	
S7801	EVQ11G07K	SWITCH,OPEN/CLOSE	1	
S7802	EVQ11G07K	SWITCH,SKIP-F	1	
S7809	EVQ11G07K	SWITCH,CH-DOWN	1	
S7811	EVQ11G07K	SWITCH,REC	1	
S7812	EVQ11G07K	SWITCH,STOP	1	
S7813	EVQ11G07K	SWITCH,SKIP-R	1	
S7819	EVQ11G07K	SWITCH,CH-UP	1	
S7820	EVQ11G07K	SWITCH,TIME WARP	1	
S7821	EVQ11G07K	SWITCH,PLAY	1	
S7822	EVQ11G07K	SWITCH,SELECT	1	

23. Schematic Diagram for printing with A4 size

Ref No.	IC8001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	0	0	0	0	0	0	0	0	4.7	2.4	0	2.3	5.0	5.0	0	0	5.0	0	0	0
PLAY	0	0	0	0	0	0	0	0	4.7	2.4	0	2.3	5.0	5.0	0	0	5.0	0	0	0
STOP	0	0	0	0	0	0	0	0	4.7	2.4	0	2.3	5.0	5.0	0	0	5.0	0	0	0

Ref No.	IC8001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	0	0	0	0	0	0	0	4.2	4.2	4.4	0	0	0	0	0	5.0	0	0	0	0
PLAY	0	0	0	0	0	0	0	4.2	4.2	4.4	0	0	0	0	0	5.0	0	0	0	0
STOP	0	0	0	0	0	0	0	4.2	4.2	4.4	0	0	0	0	0	5.0	0	0	0	0

Ref No.	IC8001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

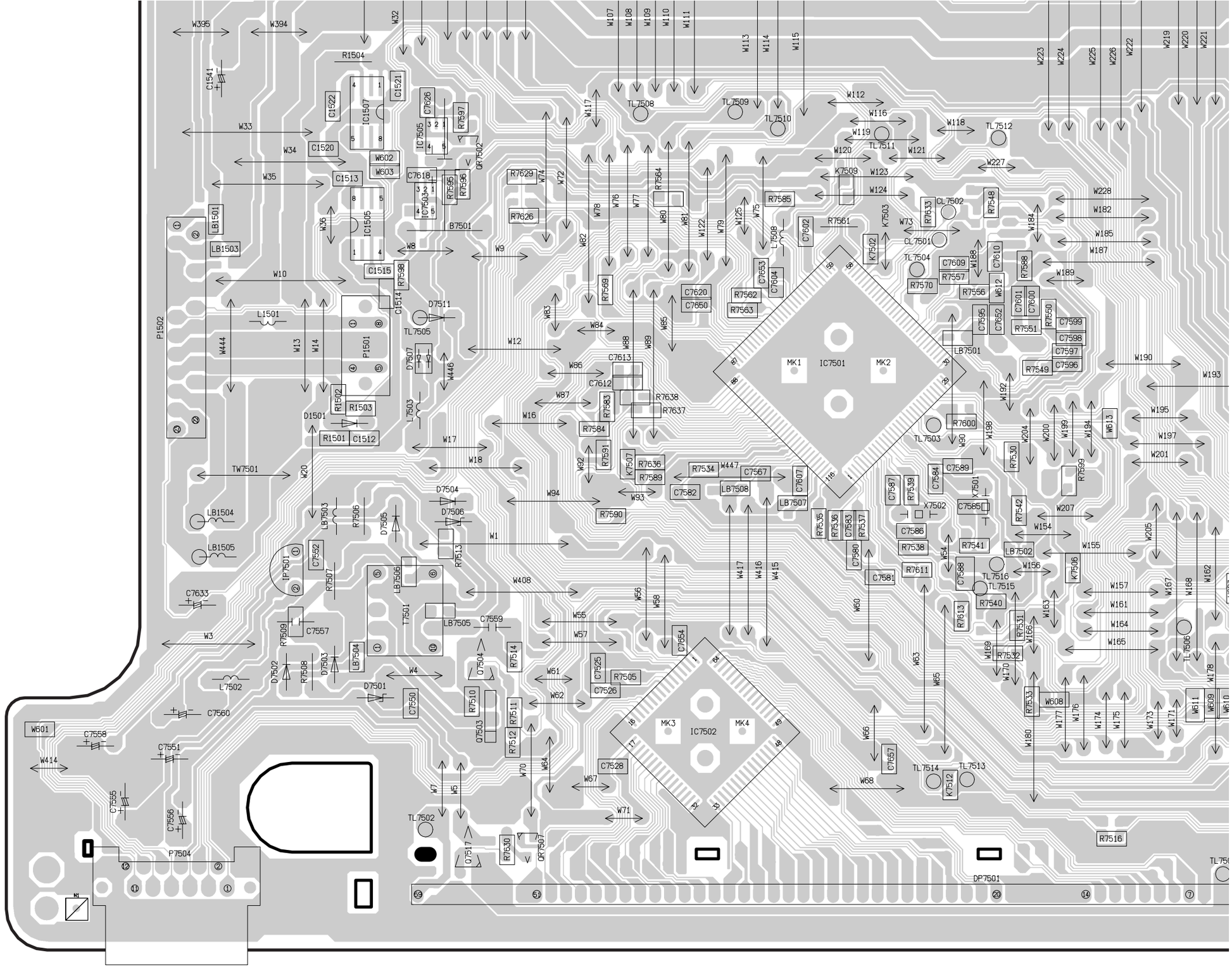
Ref No.	IC8001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0	5.0	0	0
PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0	5.0	0	0
STOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0	5.0	0	0

Ref No.	IC8002																			
MODE	1	2	3	4	5															
REC	4.7	5.0	0	0	1.8															
PLAY	4.7	5.0	0	0	1.8															
STOP	4.7	5.0	0	0	1.8															

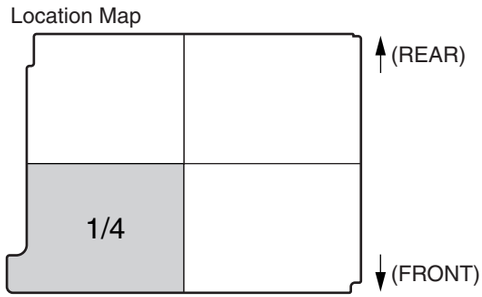
Ref No.	Q8001				Q8002				Q8003				Q8004				Q8005			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
REC	4.4	4.4	4.6		3.9	4.2	4.3		4.9	5.0	5.0		0	5.0	0		0	0	0	
PLAY	4.4	4.4	4.6		3.9	4.2	4.3		4.9	5.0	5.0		0	5.0	0		0	0	0	
STOP	4.4	4.4	4.6		3.9	4.2	4.3		4.9	5.0	5.0		0	5.0	0		0	0	0	

MAIN P.C.B.

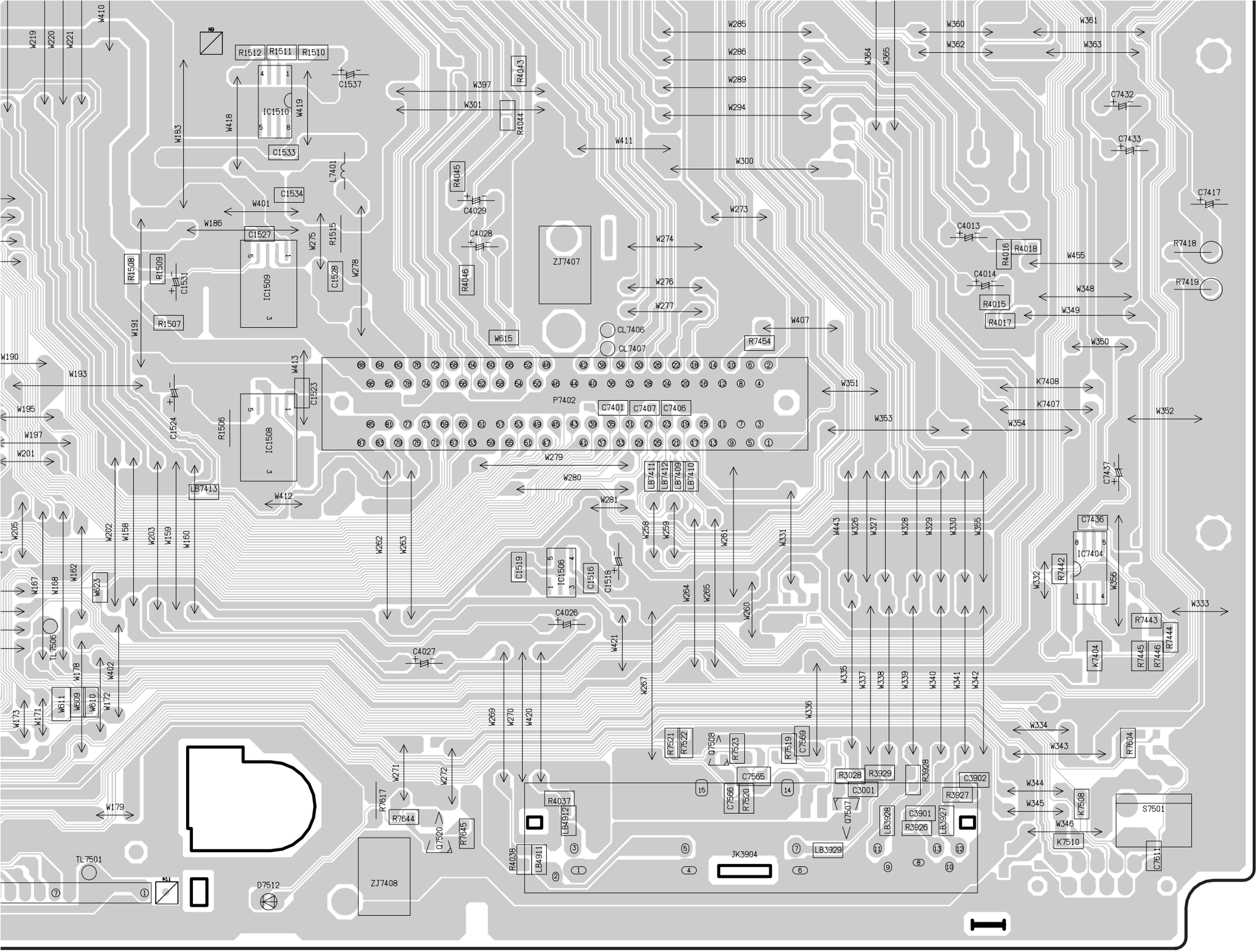
Integrated Circuit	
IC1502	E-7
IC1505	C-2
IC1506	B-6
IC1507	C-2
IC1508	B-5
IC1509	C-5
IC1510	C-5
IC3001	E-6
IC4001	E-4
IC4004	D-5
IC4005	E-2
IC7404	B-8
IC7501	B-3
IC7502	A-3
IC7503	C-2
IC7505	C-2
IC7506	E-1
Transistor	
Q4001	E-2
Q4002	F-2
Q4003	E-2
Q4004	F-3
Q4005	E-2
Q7401	D-8
Q7503	A-2
Q7504	B-2
Q7507	A-7
Q7508	A-6
Q7512	E-1
Q7517	A-2
Q7520	A-6
Transistor-resistor	
QR4001	D-2
QR4002	D-2
QR4003	D-2
QR4004	D-2
QR7502	C-2
QR7507	A-2
Test Point	
CL3001	D-6
CL7406	C-6
CL7407	C-6
CL7501	C-4
CL7502	C-4
TL7401	D-8
TL7501	A-4
TL7502	A-2
TL7503	B-4
TL7504	C-4
TL7505	C-2
TL7506	B-4
TL7507	D-7
TL7508	C-3
TL7509	C-3
TL7510	C-3
TL7511	C-3
TL7512	C-4
TL7513	A-4
TL7514	A-4
TL7515	B-4
TL7516	B-4
TW7501	B-1
Connector	
JK3901	F-6
JK3902	F-3
JK3903	F-4
JK3904	A-7
P1501	C-2
P1502	C-1
P7402	B-6
P7503	E-1
P7504	A-1
PP7401	F-2
Diode	
D1501	B-2
D4001	E-2
D4002	E-2
D7401	E-8
D7501	A-2
D7502	B-2
D7503	B-2
D7504	B-2
D7505	B-2
D7506	B-2
D7507	C-2
D7511	C-2
D7512	A-5
Crystal Osillator	
X7501	B-4
X7502	B-4
IC Protector	
IP7501	B-2
Coil	
L1501	C-1
L3001	E-7
L3002	F-6
L4901	E-5
L7401	C-5
L7502	B-1
L7503	B-2
L7508	C-3
LB1501	C-1
LB1503	C-1
LB1504	B-1
LB1505	B-1
LB3905	F-6
LB3906	F-6
LB3907	F-6
LB3908	F-6
LB3909	F-6
LB3910	F-6
LB3915	F-3
LB3916	F-3
LB3917	F-3
LB3918	F-3
LB3919	F-3
LB3920	F-3
LB3924	F-5
LB3925	F-4
LB3926	F-4
LB3927	A-7
LB3928	A-7
LB3929	A-7
LB4903	F-5
LB4904	F-5
LB4905	F-5
LB4906	F-5
LB4907	F-2
LB4908	F-2
LB4909	F-2
LB4910	F-3
LB4911	A-6
LB4912	A-6
LB7402	E-7
LB7409	B-6
LB7410	B-6
LB7411	B-6
LB7412	B-6
LB7413	B-5
LB7501	C-4
LB7502	B-4
LB7503	B-2
LB7504	B-2
LB7505	B-2
LB7506	B-2
LB7507	B-3
LB7508	B-3
Capacitor	
C1503	E-7
C1505	F-7
C1512	B-2
C1513	C-2
C1514	C-2
C1515	C-2
C1516	B-6
C1518	B-6
C1519	B-6
C1520	C-2
C1521	C-2
C1522	C-2
C1523	B-5
C1524	B-5
C1527	C-5
C1528	C-5
C1531	C-5
C1533	C-5
C1534	C-5
C1537	C-5
C1539	D-2
C1540	D-1
C1541	C-1
C1543	D-2
C3001	A-7
C3005	D-6
C3006	D-6
C3007	E-6
C3008	E-6
C3010	E-7
C3011	E-6
C3012	E-6
C3013	E-6
C3014	E-7
C3015	E-7
C3016	E-6
C3017	E-7
C3018	E-7
C3019	E-7
C3020	E-6
C3021	E-6
C3022	E-5
C3023	E-5
C3024	E-5
C3025	E-5
C3026	E-5
C3027	E-5
C3028	E-6
C3029	E-6
C3030	E-6
C3031	E-6
C3032	E-6
C3033	E-5
C3034	E-7
C3035	D-6
C3036	E-6
C3037	D-6
C3038	D-6
C3039	E-6
C3040	D-6
C3041	E-6
C3042	D-6
C3043	E-6
C3044	E-6
C3046	E-7
C3047	E-7
C3901	A-7
C3902	A-7
C3909	F-6
C3910	F-6
C3911	F-6
C3912	F-6
C3917	F-3
C3918	F-3
C4003	E-4
C4004	E-4
C4005	E-4
C4006	E-4
C4009	E-4
C4010	E-4
C4011	E-3
C4013	C-7
C4014	C-7
C4016	D-3
C4017	D-4
C4019	D-4
C4022	D-4
C4023	D-4
C4024	D-4
C4025	D-4
C4026	B-6
C4027	B-6
C4028	C-6
C4029	C-6
C4036	D-3
C4037	E-3
C4038	E-3
C4039	F-3
C4040	F-2
C4041	F-3
C4042	F-2
C4045	E-2
C4046	D-5
C4047	D-5
C4049	D-5
C4050	E-2
C4052	E-2
C4901	E-5
C7401	B-6
C7404	E-8
C7405	F-7
C7406	B-6
C7407	B-6
C7416	E-8
C7417	C-8
C7432	C-8
C7433	C-8
C7436	B-8
C7437	B-8
C7525	B-3
C7526	A-3
C7528	A-3
C7550	A-2
C7551	A-1
C7552	B-2
C7555	A-1
C7556	A-1
C7557	B-2
C7558	A-1
C7559	B-2
C7560	A-1
C7565	A-7
C7566	A-7
C7567	B-3
C7569	A-7
C7580	B-3
C7581	B-3
C7582	B-3
C7583	B-3
C7584	B-4
C7585	B-4
C7586	B-4
C7587	B-3
C7588	B-4
C7589	B-4
C7595	C-4
C7596	C-4
C7597	C-4
C7598	C-4
C7599	C-4
C7600	C-4
C7601	C-4
C7602	C-3
C7604	C-3
C7607	B-3
C7609	C-4
C7610	C-4
C7611	A-8
C7612	B-3
C7613	C-3
C7618	C-2
C7620	C-3
C7626	C-2
C7633	B-1
C7636	E-2
C7637	E-1
C7639	E-1
C7650	C-3
C7652	C-4
C7653	C-3
C7654	B-3
C7657	A-3
Resistor	
R1501	B-2
R1502	B-2
R1503	B-2
R1504	C-2
R1506	B-5
R1507	C-5
R1508	C-5
R1509	C-5
R1510	D-5
R1511	D-5
R1512	D-5
R1515	C-5
R1516	D-2
R3025	D-6
R3026	D-6
R3027	D-7
R3028	A-7
R3029	E-7
R3030	E-7
R3031	E-6
R3032	E-6
R3033	E-6
R3036	E-7
R3038	D-6
R3039	D-6
R3040	D-6
R3041	D-6
R3901	F-6
R3902	F-6
R3903	F-6
R3904	F-6
R3905	F-6
R3906	F-6
R3907	F-6
R3908	F-6
R3909	F-3
R3910	F-3
R3911	F-3
R3912	F-3
R3913	F-3
R3914	F-3
R3915	F-3
R3916	F-3
R3923	F-5
R3924	F-4
R3925	F-4
R3926	A-7
R3927	A-7
R3928	A-7
R3929	A-7
R4001	F-5
R4002	F-5
R4003	F-5
R4004	F-5
R4008	E-4
R4011	F-5
R4012	F-5
R4013	F-5
R4014	F-5
R4015	C-7
R4016	C-7
R4017	C-7
R4018	C-7
R4019	D-3
R4020	D-3
R4024	D-4
R4025	D-4
R4026	D-4
R4027	D-4
R4028	D-4
R4029	D-4
R4031	D-5
R4032	D-4
R4037	A-6
R4038	A-6
R4039	E-3
R4042	E-3
R4043	C-6
R4044	C-6
R4045	C-6
R4046	C-6
R4049	D-2
R4050	E-2
R4051	E-2
R4052	D-2
R4059	E-3
R4060	D-3
R4061	E-2
R4062	E-3
R4063	E-2
R4064	E-2
R4065	E-2
R4066	E-2
R4067	E-3
R4068	E-2
R4069	F-2
R4070	F-3
R4071	F-2
R4072	F-2
R4074	D-4
R4075	D-4
R4077	D-5
R4078	E-2
R4082	E-3
R4901	F-5
R4903	F-5
R7403	F-8
R7404	F-8
R7406	D-8
R7407	D-8
R7418	C-8
R7419	C-8
R7442	B-8
R7443	B-8
R7444	B-8
R7445	B-8
R7446	B-8
R7452	D-8
R7454	C-7
R7505	B-3
R7506	B-2
R7507	B-2
R7508	B-2
R7509	B-2
R7510	A-2
R7511	A-2
R7512	A-2
R7513	B-2
R7514	B-2
R7516	A-4
R7519	A-7
R7520	A-7
R7521	A-6
R7522	A-6
R7523	A-7
R7530	B-4
R7531	B-4
R7532	B-4
R7533	A-4
R7534	B-3
R7535	B-3
R7536	B-3
R7537	B-3
R7538	B-4
R7539	B-4
R7540	B-4
R7541	B-4
R7542	B-4
R7548	C-4
R7549	C-4
R7550	C-4
R7551	C-4
R7556	C-4
R7557	C-4
R7561	C-3
R7562	C-3
R7563	C-3
R7564	C-3
R7569	C-3
R7570	C-4
R7583	B-3
R7584	B-3
R7585	C-3
R7588	C-4
R7589	B-3
R7590	B-3
R7591	B-3
R7595	C-2
R7596	C-2
R7597	C-2
R7598	C-2
R7599	B-4
R7600	B-4
R7601	E-1
R7602	E-1
R7603	E-1
R7604	A-8
R7611	B-4
R7613	B-4
R7617	A-5
R7626	C-2
R7629	C-2
R7630	A-2
R7633	C-4
R7636	B-3
R7637	B-3
R7638	B-3
R7644	A-5
R7645	A-6
Transformer	
T7501	B-2
Backup Battery	
B7501	C-2



Location Map



DMR-E85HP/PC
Main P.C.B. (REP3662F)
(1/4 Section)



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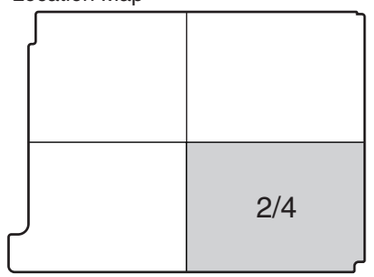
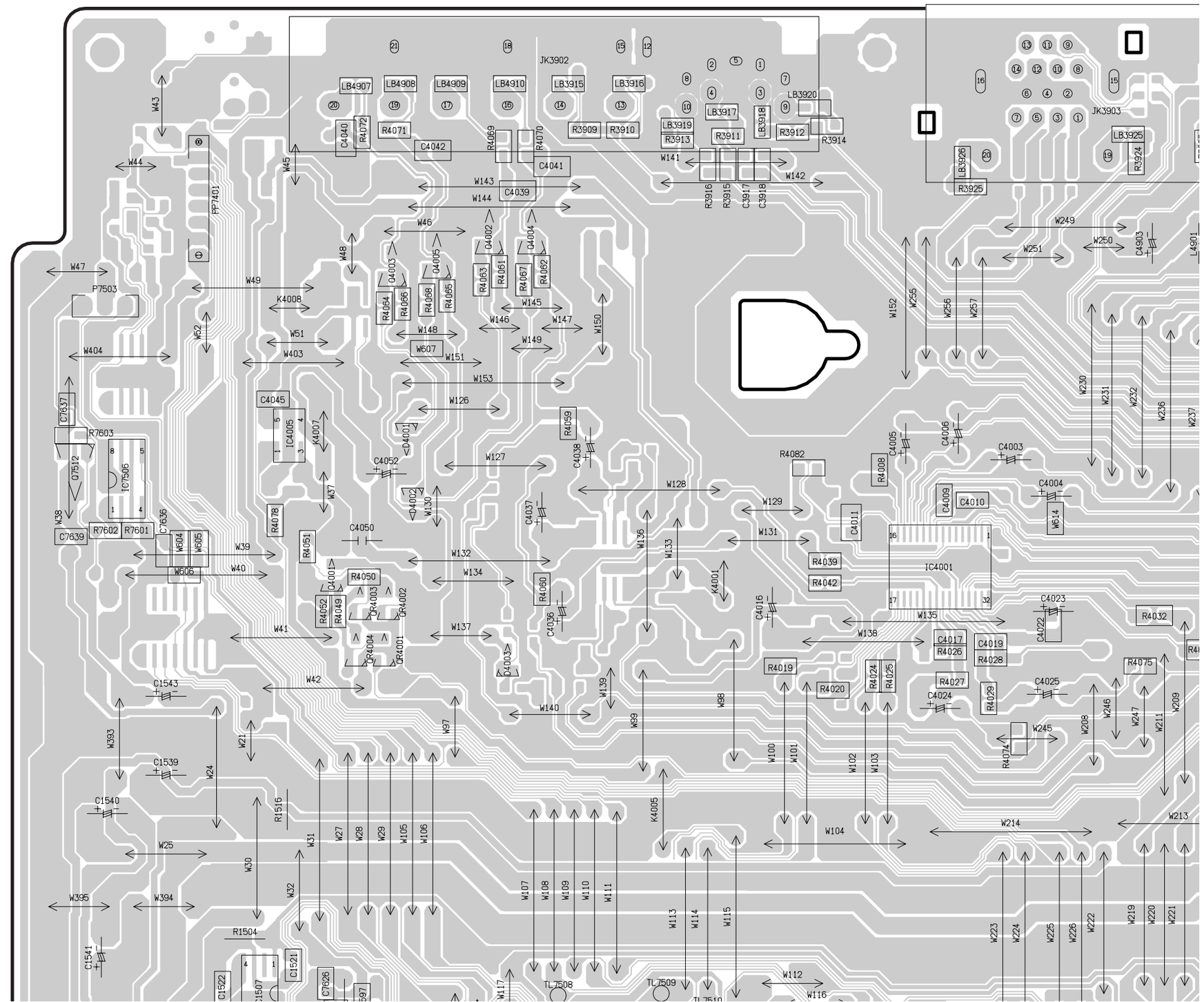


DMR-E85HP/PC
Main P.C.B. (REP3662F)
(2/4 Section)

5 6 7 8

MAIN P.C.B.



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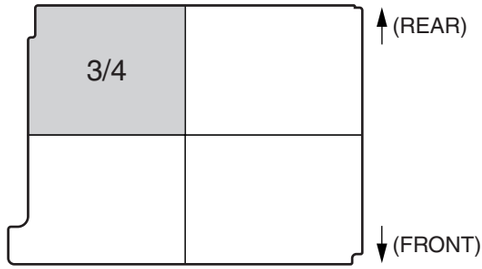
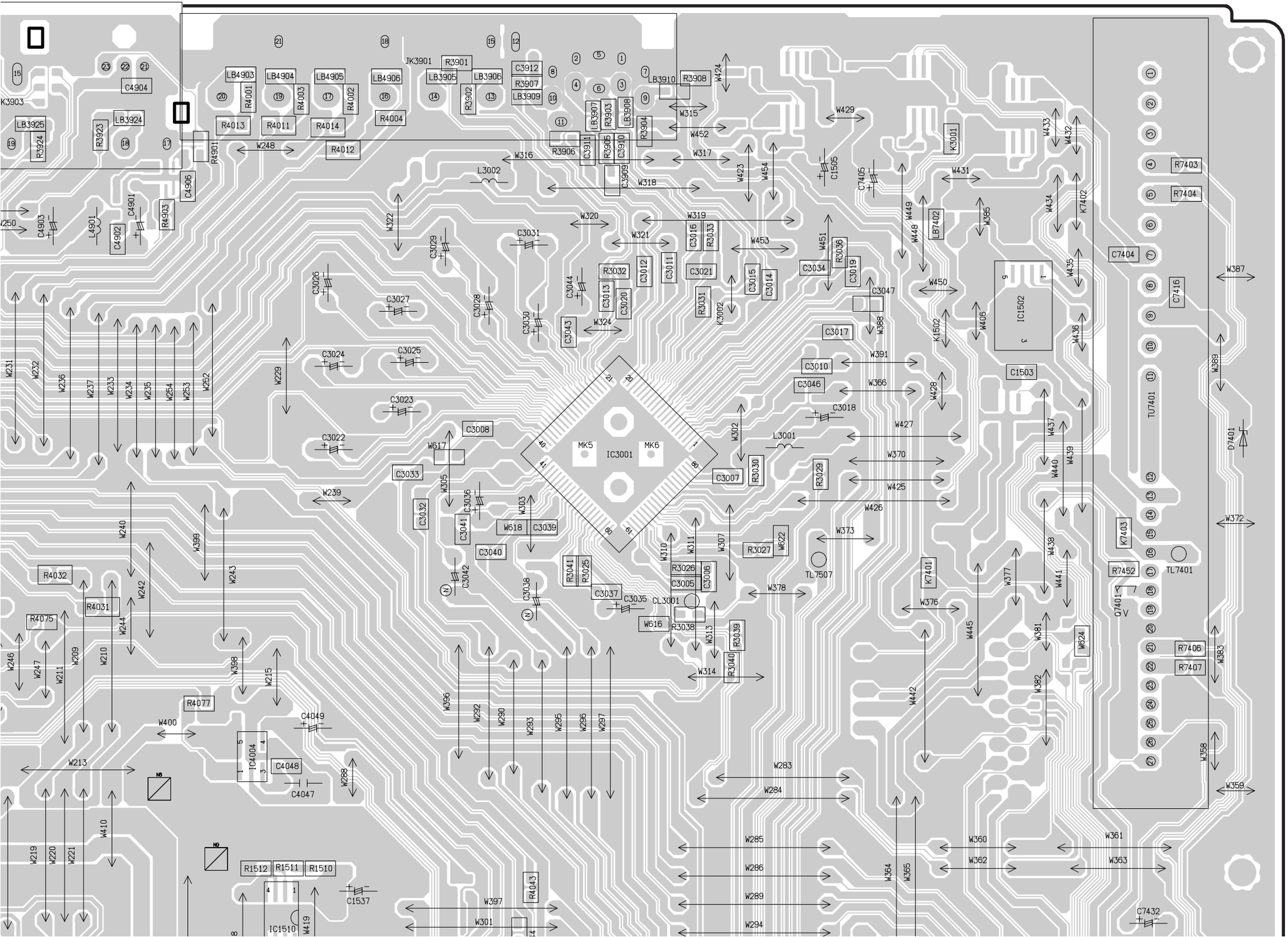
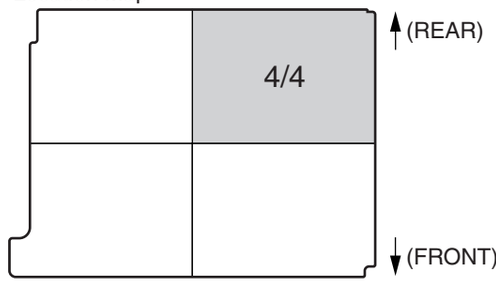


DMR-E85HP/PC
Main P.C.B. (REP3662F)
(3/4 Section)



Location Map



DMR-E85HP/PC
Main P.C.B. (REP3662F)
(4/4 Section)

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

IC6001
MN2DS0011-H
(AVDEC/MAIN CPU)

DMR-E85HP/PC AV Decoder/Main CPU Section(Digital P.C.B.(4/5)) Schematic Diagram(MC)

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

IC6001
MN2DS0011-H
(AVDEC/MAIN CPU)

DMR-E85HP/PC AV Decoder/Main CPU Section(Digital P.C.B.(4/5)) Schematic Diagram(MC)

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

DMR-E85HP/PC
AV Decoder/Main CPU Section
(Digital P.C.B.(4/5))
Schematic Diagram(MC)

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

TO P9001
DIGITAL P.C.B.
(GLUE NET)
P7402

D1.2V	88		D1.2V (P)
	87		
D1.2V	86		
	85		
D1.5V	84		
D5V	83		D5V (P)
D1.2V	82		
	81		
D1.5V	80		
ANA5V	79		ANA5V (P)
D1.5V	78		D1.5V (P)
GND	77		
D3.3V	76		D3.3V (P)
ANA3.3V	75		ANA3.3V (P)
D3.3V	74		
	73		
IECOUT	72		IECOUT (V)
	71		
XDMUTE	70		XDMUTE (A)
UARTG2P	69		UARTG2P (T)
AU5V	68		AU5V (A)
DGND	67		
	66		
UARTP2G	65		UARTP2G (T)
AUGND	64		
DGND	63		
MIXLOUT DM	62		MIXLOUT DM (A)
DGND	61		
AUGND	60		
DGND	59		
MIXROUT DM	58		MIXROUT DM (A)
DGND	57		
AUGND	56		
	55		
AUGND	54		
	53		
AUGND	52		
	51		
AADC L	50		AADC L (A)
	49		
AADC R	48		AADC R (A)
ITM2A	47		
DGND	46		
ITA2M	45		
DGND	44		
	43		
PRGSEL	42	● CL7406	
	41		
DGND	40		
SBPTM	39		SBPTM (T)
CSYNC IN	38	● CL7407	
SBMTP	37		SBMTP (T)
DGND	36		
XMPREQ	35		XMPREQ (T)
RPROUT DM	34		RPROUT DM (V)
SCLK	33		SCLK (T)
DGND	32		
	31		
BPBOUT DM	30		BPBOUT DM (V)
XINTP	29		XINTP (T)
DGND	28		
XINTM	27		XINTM (T)
GPYOUT DM	26		GPYOUT DM (V)
SCURVE0	25		
DGND	24		
SCURVE1	23		
YOUT DM	22		YOUT DM (V)
I2C5CK	21		IIC CLK (V)(A)
DGND	20		
I2C5DT	19		IIC DATA (V)(A)
COUT DM	18		COUT DM (V)
	17		
DGND	16		
	15		
DGND	14		
R/CR IN	13		
DGND	12		
DGND	11		
EPG ON Ⓗ	10		EPG ON Ⓗ (T)
B/CB IN	9		
DGND	8		
DGND	7		
RGB CPSVIN	6		
G/CY IN	5		
DGND	4		
DGND	3		
V YIN DM	2		V YIN DM (V)
CPNCIN DM	1		CPNCIN DM (V)

LB7413
J0JHC0000032
L7401 22
C7401 3P
LB7409 J0JHC0000032
LB7410 J0JHC0000032
R7454
0
AUGND (A)
LB7412 ERJ3GEY0R00V
LB7411 ERJ3GEY0R00V
C7406 0.1
C7407 0.1

TO FRAME GND
ZJ7407 K9ZZ00000424
ZJ7408 K9ZZ00000424

TU7401
ENGD6201DR

AGC	TU	-	SCL	SDA	-	REG 5V	-	BTL	-	IF OUT	IF IN	REG 5V	-	GND	AFT	AGC OUT	VIDEO OUT	-	GND	SCL	SDA	-	-	-	R OUT	L OUT
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	28	27

R7403 100
R7404 100
TL7401
K7403 0
R7406 100
R7407 100
C7432 16V10
C7433 16V10
TUNER L (A)
TUNER R (A)
K7402 VWJ0023=7.5
C7404 0.01
C7405 6V47
D7401 MAZ4300NMF
C7416 0.01
C7417 50V1
R7418 470
R7419 470
LB7402 J0JHC0000032
K7401 0
TU VIDEO IN (V)
Q7401 2SB1218A0L (AMP)
R7452 680

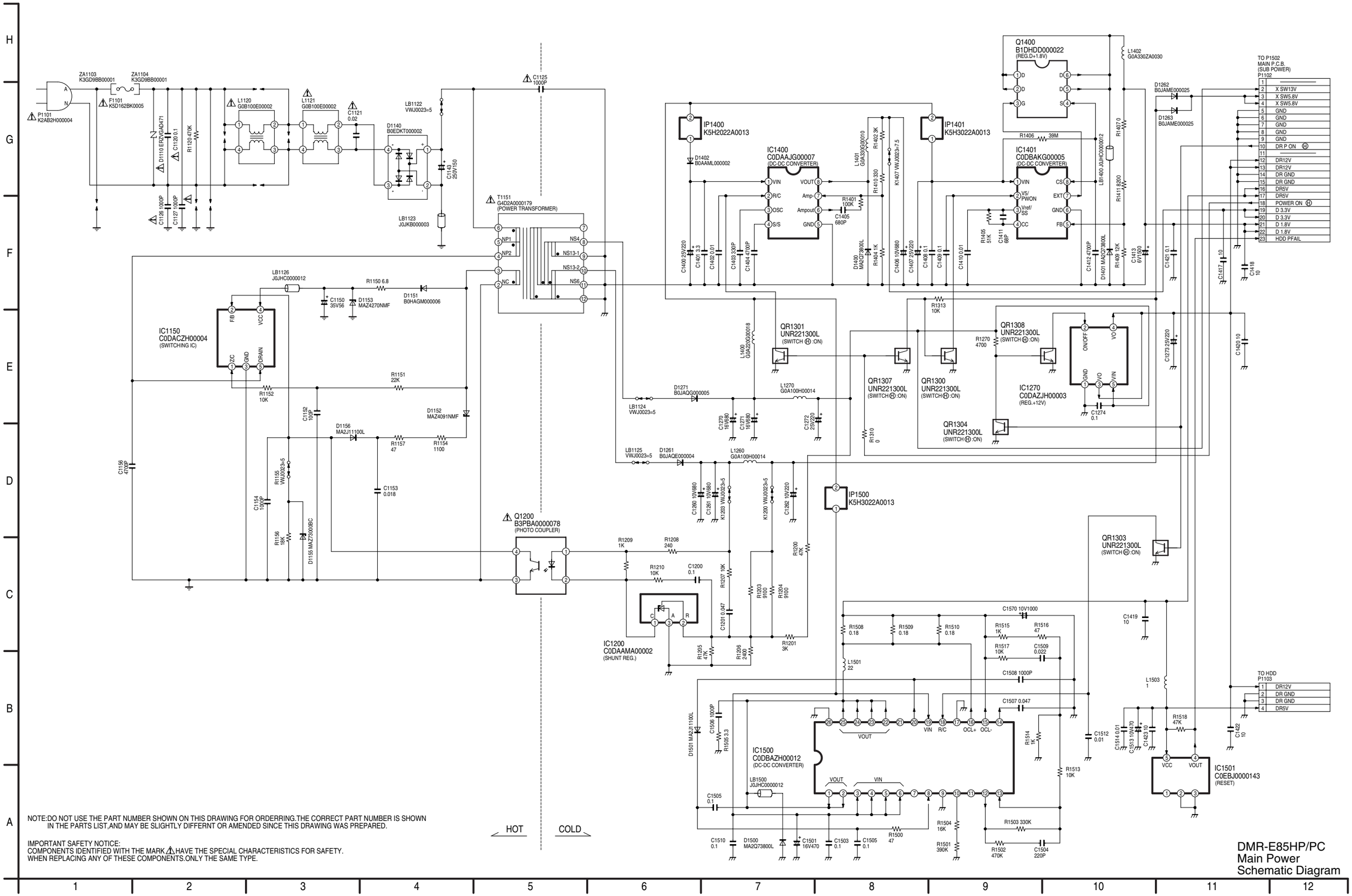
TO P8001
IR P.C.B.
PP7401

1	D5V
2	GND
3	IR CS
4	IR DATA
5	IR CLK
6	IR BUSY
7	ITM2A
8	ITA2M

IR BUSY (T)
IR CLK (T)
IR DATA (T)
IR CS (T)
UNREG38V (T)
JC REG5V (P)
C7436 0.1
C7437 6V47
R7442 2200
IC7404
C0BBBB000006
(JC CLK OUT)
VCC OUT - + (8 7 6 5)
OUT - + VSS (1 2 3 4)
R7443 1K
R7444 15K
R7446 13K
R7445 2200
K7404 0
K7408 VWJ0023=12.5
K7407 VWJ0023=12.5

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Main Net Section(Main P.C.B.(2/5))
Schematic Diagram(M)



NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS.ONLY THE SAME TYPE.

DMR-E85HP/PC Main Power Schematic Diagram

POWER P.C.B.

MAIN P.C.B.

AC SOCKET
P1101

F1101
250V1.6A

D1110,L1120
SURGE SUPPRESSOR AND SURGE ABSORBER

D1140
C1143
RECTIFIER

T1151
POWER TRANSFORMER
NP1
NP2
NC
NS4
NS13 -1
NS13 -2
NS6

IC1150
(SW IC)
Z/C
DRAIN
VCC
F/B

D1151

IP1401

IC1401
(DC-DC CONVERTER)
VIN
EXT
V5 /PWON
FB
CS

QR1300

Q1400
(SWITCHING)
G
D
S

D+1.8V
P1102 P1502
21,22
A

IP1400

IC1400
(DC-DC CONVERTER)
VIN
VOUT
R/C ON/OFF

QR1301

QR1307

D+3.3V
P1102 P1502
19,20
B

POWER ON Ⓗ
P1102 P1502
18
C

X SW+5.8V
P1102 P1502
3,4
D

IP1500

IC1500
(DC-DC CONVERTER)
VIN
VOUT
R/C
OCL-
OCL+

DR+5V
P1103
4
(TO HDD)

IC1501
(RESET)
VCC
VOUT

HDD PFAIL Ⓛ
P1102 P1502
23
IC7501- ㉕

P1103
1
(TO HDD)

IC1270
(REG.DR+12V)
VIN
Vo
ON/OFF

DR+12V
P1102 P1502
12,13
P1501 P102
1,8
(TO DVD RAM DRIVE)

X SW+13V
P1102 P1502
2
E

DR+5V
P1102 P1502
16,17
P1501 P102
4,5
(TO DVD RAM DRIVE)

QR1303

QR1304,
QR1308

DR P ON Ⓗ
P1102 P1502
10
IC7501- ㊻

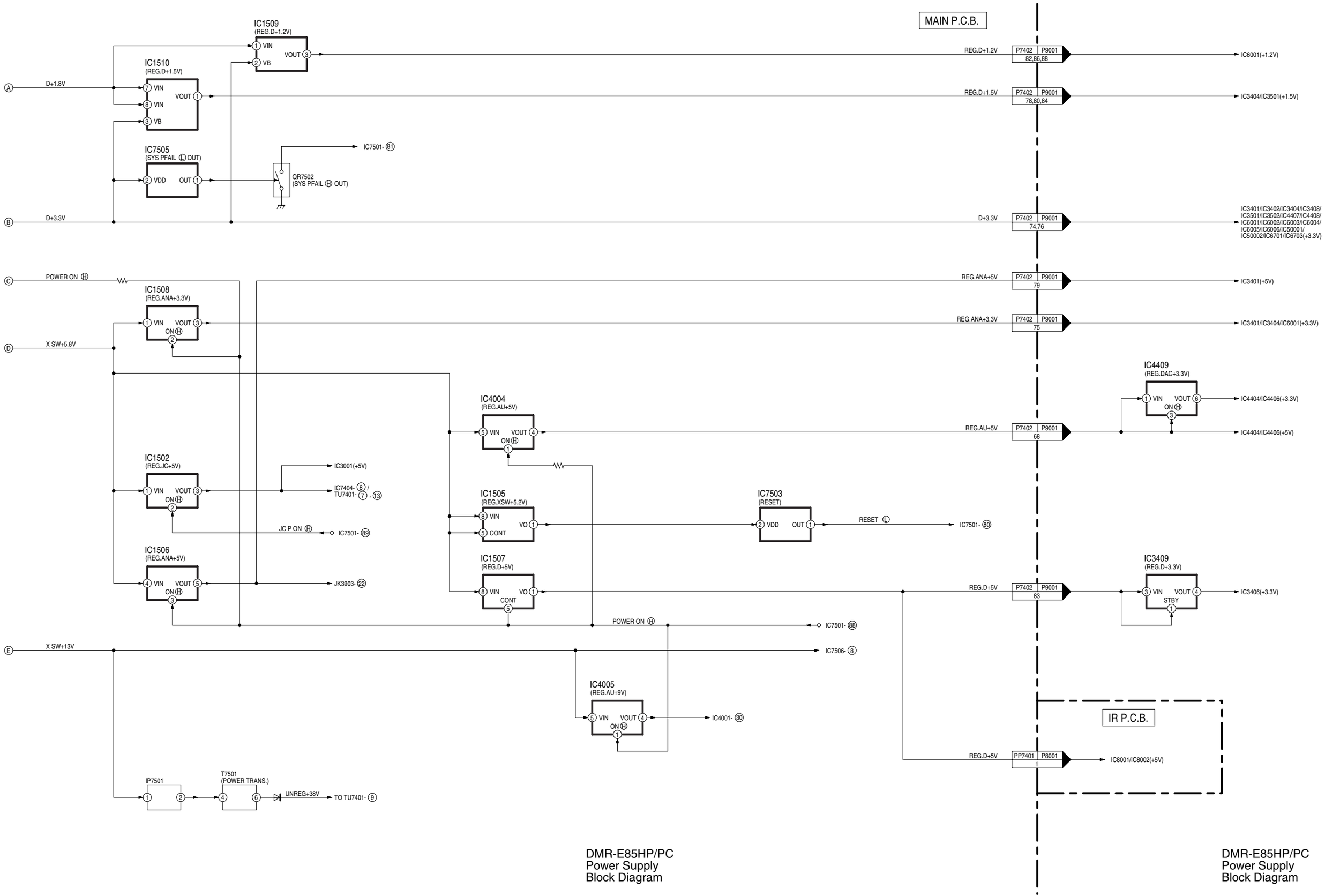
Q1200
PHOTO COUPLER

IC1200
(SHUNT REG.)

HOT

COLD

DMR-E85HP/PC
Power Supply
Block Diagram



DMR-E85HP/PC
Power Supply
Block Diagram

DMR-E85HP/PC
Power Supply
Block Diagram

Ref No.	IC1150						IC1200				IC1270										
MODE	1	2	3	4	5		1	2	3		1	2	3	4	5						
REC	2.3	1.8	0	14.6	-205		5.2	2.5	0		0	1.8	12.1	12.1	13.1						
PLAY	2.3	1.8	0	14.6	-234		5.2	2.5	0		0	1.8	12.1	12.1	13.1						
STOP	2.3	1.8	0	14.6	-229		5.2	2.5	0		0	1.8	12.1	12.1	13.1						

Ref No.	IC1400								IC1401										
MODE	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8			
REC	12.3	0	1.5	4.2	0	1.3	0.8	5.4	13.1	4.5	1.2	1.3	1.2	0	11.6	13.1			
PLAY	12.3	0	1.5	4.3	0	1.3	0.8	5.0	13.1	4.5	1.2	1.2	1.2	0	11.6	13.1			
STOP	12.3	0	1.5	4.3	0	1.3	0.8	5.3	13.1	4.5	1.2	1.2	1.2	0	11.6	13.1			

Ref No.	IC1500																				
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
REC	6.0	6.0	13.1	13.1	13.1	13.1	8.7	12.1	0	2.6	4.9	1.8	2.4	4.3	5.0	5.1	0	0	13.1	6.7	
PLAY	6.0	6.0	13.1	13.1	13.1	13.1	8.7	12.1	0	2.6	4.9	1.8	2.4	4.3	5.0	5.1	0	0	13.1	6.7	
STOP	6.0	6.0	13.1	13.1	13.1	13.1	8.7	12.1	0	2.6	4.9	1.8	2.4	4.3	5.0	5.1	0	0	13.1	6.7	

Ref No.	IC1500																				
MODE	21	22	23	24	25	26															
REC	-	6.0	6.0	6.0	6.0	0															
PLAY	-	6.0	6.0	6.0	6.0	0															
STOP	-	6.0	6.0	6.0	6.0	0															

Ref No.	IC1501				
MODE	1	2	3	4	5
REC	-	0	0	4.9	5.0
PLAY	-	0	0	4.9	5.0
STOP	-	0	0	4.9	5.0

Ref No.	Q1200					Q1400							Q4004				Q4005		
MODE	1	2	3	4		1	2	3	4	5	6		E	C	B		E	C	B
REC	6.2	5.2	0	1.8		0.8	0.8	11.5	13.1	0.8	0.8		0	0	-0.1		0	0	-0.1
PLAY	6.2	5.2	0	1.8		0.8	0.8	11.5	13.1	0.8	0.8		0	0	-0.1		0	0	-0.1
STOP	6.2	5.2	0	1.8		0.8	0.8	11.5	13.1	0.8	0.8		0	0	-0.1		0	0	-0.1

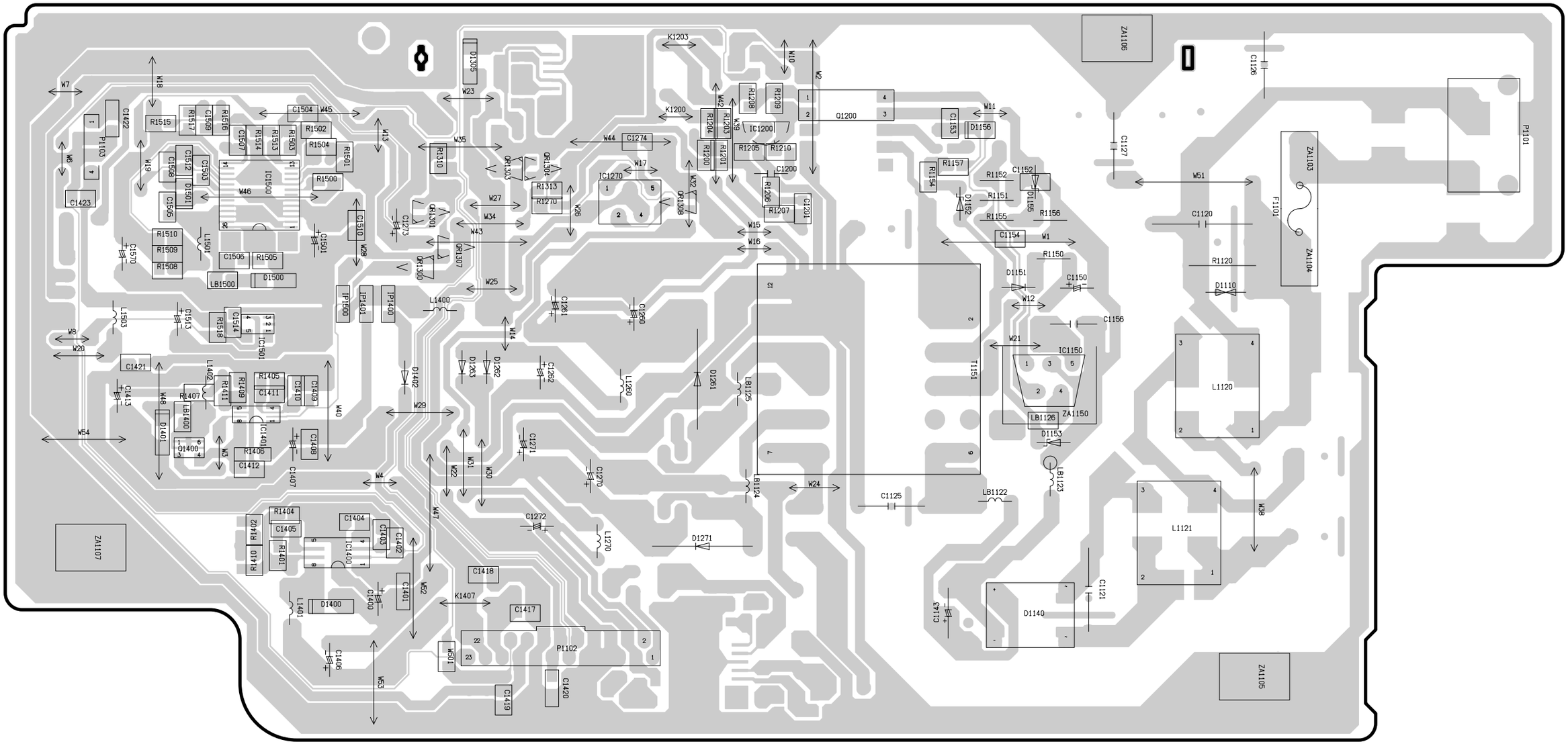
Ref No.	Q7517				Q7520		
MODE	E	C	B		E	C	B
REC	-19.8	-19.8	-19.1		0	2.7	0
PLAY	-19.8	-19.8	-19.1		0	2.7	0
STOP	-19.8	-19.8	-19.1		0	2.7	0

Ref No.	QR1300				QR1301				QR1303				QR1304				QR1307		
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B
REC	0	4.5	0		0	0	3.3		0	0	5.0		0	0	5.0		0	0	3.3
PLAY	0	4.5	0		0	0	3.3		0	0	5.0		0	0	5.0		0	0	3.3
STOP	0	4.5	0		0	0	3.3		0	0	5.0		0	0	5.0		0	0	3.3

Ref No.	QR1308				QR7507		
MODE	E	C	B		E	C	B
REC	0	1.8	0		4.9	4.9	0
PLAY	0	1.8	0		4.9	4.8	0
STOP	0	1.8	0		4.9	4.8	0

POWER P.C.B.

POWER P.C.B.																	
Integrated Circuit		P1103	D-1	IP1500	C-3	LB1500	C-2	C1273	D-3	C1422	D-1	R1155	D-6	R1407	C-2
IC1150	C-6	**Diode**		**Transformer**		**Capacitor**		C1274	D-4	C1423	D-1	R1156	D-6	R1409	C-2
IC1200	D-5	D1110	C-7	T1151	C-5	C1120	C-7	C1400	B-3	C1501	C-2	R1157	D-6	R1410	B-2
IC1270	D-4	D1140	A-6	**Fuse**		C1121	A-7	C1401	B-3	C1503	D-2	R1200	D-5	R1411	C-2
IC1400	B-3	D1151	C-6	F1101	D-8	C1125	B-6	C1402	B-3	C1504	D-2	R1201	D-5	R1500	D-3
IC1401	C-2	D1152	D-6	**Coil**		C1126	E-8	C1403	B-3	C1505	D-2	R1203	D-5	R1501	D-3
IC1500	D-2	D1153	B-6	L1120	C-7	C1127	D-7	C1404	B-3	C1506	C-2	R1204	D-5	R1502	D-2
IC1501	C-2	D1155	D-6	L1121	B-7	C1143	A-6	C1405	B-2	C1507	D-2	R1205	D-5	R1503	D-2
Transistor		D1156	D-6	L1260	C-4	C1150	C-7	C1406	A-3	C1508	D-2	R1206	D-5	R1504	D-3
Q1200	D-5	D1261	C-5	L1270	B-4	C1152	D-6	C1407	B-2	C1509	D-2	R1207	D-5	R1505	C-2
Q1400	B-2	D1262	C-3	L1400	C-3	C1153	D-6	C1408	B-2	C1510	D-3	R1208	D-5	R1508	C-2
Transistor-resistor		D1263	C-3	L1401	B-2	C1154	D-6	C1409	C-2	C1512	D-2	R1209	D-5	R1509	C-2
QR1300	C-3	D1271	B-5	L1402	C-2	C1156	C-7	C1410	C-2	C1513	C-2	R1210	D-5	R1510	D-2
QR1301	D-3	D1400	B-3	L1501	C-2	C1200	D-5	C1411	C-2	C1514	C-2	R1270	D-4	R1513	D-2
QR1303	D-4	D1401	B-2	L1503	C-1	C1201	D-5	C1412	B-2	C1570	C-1	R1310	D-3	R1514	D-2
QR1304	D-4	D1402	C-3	LB1122	B-6	C1260	C-4	C1413	C-1	**Resistor**		R1313	D-4	R1515	D-2
QR1307	C-3	D1500	C-2	LB1123	B-6	C1261	C-4	C1417	B-4	R1120	C-7	R1401	B-2	R1516	D-2
QR1308	D-4	D1501	D-2	LB1124	B-5	C1262	C-4	C1418	B-3	R1150	C-6	R1402	B-2	R1517	D-2
Connector		**IC Protector**		LB1125	C-5	C1270	B-4	C1419	A-3	R1151	D-6	R1404	B-2	R1518	C-2
P1101	D-9	IP1400	C-3	LB1126	C-6	C1271	B-4	C1420	A-4	R1152	D-6	R1405	C-2		
P1102	A-4	IP1401	C-3	LB1400	C-2	C1272	B-4	C1421	C-2	R1154	D-6	R1406	B-2		



DMR-E85HP/PC
POWER P.C.B.
(VEP01950B)

TO P1102
POWER P.C.B.
P1502

	1
X SW13V	2
X SW 5.8V	3
X SW 5.8V	4
GND	5
GND	6
GND	7
GND	8
GND	9
DR P ON Ⓗ	10
	11
DR12V	12
DR12V	13
DRGND	14
DRGND	15
DR5V	16
DR5V	17
POWER ON Ⓗ	18
D3.3V	19
D3.3V	20
D1.8V	21
D1.8V	22
HDD PFAIL	23

LB1501 J0JHC0000032
LB1503 J0JHC0000032
LB1504 J0JKB0000003
LB1505 J0JKB0000003
L1501 22

T HDD PFAIL
T DR P ON Ⓗ

P1501
TO DVD RAM DRIVE UNIT

DR12V	1
GND	2
GND	3
DR5V	4
DR5V	5
GND	6
GND	7
DR12V	8

D1501 MA2C165001VT
R1503 100
R1502 3300
R1501 8200
C1512 1
C1541 10V470
C1543 25V220
C1518 10V47
R1516 270
C1539 6V1000
C1540 25V47
C1513 1
C1516 1
C1520 1

IC1505
C0CBCDD00008
(REG.XSW+5.2V)
VIN NC NC CONT
VO NC GND CN
C1514 1
C1515 0.1

IC1506
C0CBCDD00002
(REG.ANA+5V)
VOUT VIN
NOISE GND ON Ⓗ
C1519 0.1

IC1507
C0CBCDD00006
(REG.D+5V)
VIN NC NC CONT
VO NC GND CN
C1522 330P
R1504 270
C1521 1

R1515 270

IC1508
C0DBEGD00002
(REG.ANA+3.3V)
V IN ON Ⓗ V OUT NC GND
C1523 1
R1506 270
C1524 10V47

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

X SW 13V A T
X SW 5.8V A
ANA5V V M
D5V M
ANA3.3V M
D3.3V M T
GND M A V T
FAN GND T
DDGND T

A T X SW 5.2V
T POWER ON Ⓗ
JC REG5V M T

IC1502
C0DBAHG00013
(REG.JC+5V)
V IN ON Ⓗ V OUT NC GND
C1503 1
C1505 10V47

V JC REG 5V
T JC P ON Ⓗ
K1502 VWJ0023=5

C1533 1

IC1509
C0DBEFG00003
(REG.D+1.2V)
V IN VB V OUT VC GND

IC1510
C0DBEGG00003
(REG.D+1.5V)
VIN VIN GND GND
VOUT SENS VB CONT

C1534 1
C1528 1
C1527 1
R1508 200
R1509 1000
R1507 33
R1511 1800
R1512 2000
R1510 22
C1531 10V47
C1537 25V100

D1.5V M
D1.2V M

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Sub Power Section (Main P.C.B(1/5))
Schematic Diagram (P)

F E D C B A
1 2 3 4 5 6 7 8 9

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

E

P JC REG5V
V SYNC IN
Q7508 2SD1819A0L (VREF OUT)
Q7507 2SB0709A0L (AMP)
R7519 1K
R7523 15K
C7569 0.1
C7565 4.7
R7516 0
R7520 10K
C7566 0.1
R7521 1.5K
C7567 0.1
R7522 5.6K
TL7513
K7512 0
TL7514
LB7508 ERJ3GEY0R00V
LB7507 ERJ3GEY0R00V
R7617 75
HDD
D7512 B3AEA0000049
Q7520 2SD0601A0L (HDD LED DRIVE)
R7644 15K
R7645 47K

M EPG ON H
M XINTM
M XINTP
M SBMTP
M SBPTM
M IR CLK
M SCLK
M IR DATA
M XMPREQ
A XTMUTE
V SYNC DET
M IR BUSY
M IR CS
M UARTP2G
M UARTG2P
P HDD PFAIL
P DR P ON H
P A POWER ON H
P JC P ON H
V L123 SWIDE
A METER L
A METER R

<NSW 5V>
<XSW 5.2V>
POWER
S7501 K0F111B00044
R7591 8200
R7590 8200
R7589 8200
C7613 0.01
C7612 0.01
C7611 0.01
R7583 47K
R7584 47K
R7533 47K
R7532 47K
R7531 47K
R7530 47K
K7510 0
K7508 0
R7638 100
R7637 100
R7636 100
R7534 100
R7535 100
C7582 100P
C7581 100P
C7580 100P
C7607 0.1
R7604 47K
C7653 0.1
R7569 100
K7507 0
R7613 100
C7583 100P
R7536 100
R7537 100
R7611 100
C7584 18P
C7585 18P
C7586 22P
C7587 15P
X7502 H0A327200026 (32.768KHz)
R7538 4700
R7539 0
R7540 270K
R7541 0
X7501 H0D100500016 (10MHz)
TL7515
C7588 4.7
LB7502 ERJ3GEY0R00V
R7542 10K
C7589 0.1
TL7506
K7506 0
TL7503
TL7512
TL7511
TL7508
K7503 VWJ0023=5
K7502
R7564 100
TL7509
TL7510
TL7507

IC7501
C2CBJG000398
(TIMER)

1 TBUS CLK
2 IR
3 J CLK
4 FL TXD
5 FL RXD
6 FL CLK
7 BYTE
8 CNVSS
9 XCIN32.768KHz
10 XCOUT
11 XRESET
12 XOUT
13 VSS
14 XIN10MHz
15 VCC
16 XNMI
17 XMPREQ
18 NC
19 SLICEON
20 XTMUTE
21 125Hz
22 NC
23 FAN PWM OUT
24 NC
25 TV ANT POW L
26 BOOSTER H
27 BS ANT POW H
28 NC
29 NC

TBUS TXD 116
FSCIN 115
VSS3 114
CVIN1 113
VDD3 112
VSS1 111
SVREF 110
SYNCIN 109
START 108
TBUS RXD 107
AVCC 106
VREF 105
KEYIN3 104
AVSS 103
DC R CH 102
DC L CH 101
BS LEVEL 100
L1 SWDE 99
KEYINT 98
KEYIN2 97
KEYIN1 96
XINTMOUT 95
XINTPOUT 94
XSH RES 93
HIFEBL 92
NET P ON H 91
EPG ON H 90
JC P ON H 89
POWER ON H 88

FL CS 87
DR P ON H 86
IR CS 85
FL RESET 84
IR BUSY 83
XINTM 82
SYS PFAIL H 81
PFAIL L 80
LED L2 79
HDD LED 78
POWER LED 77
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NC 66
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FAN LOCK 64
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XFWE 40
BUSY 41
NC 42
NC 43
NC 44
TEST2 45
NC 46
NET LED 47
NET LED 48
FILAMENT ON L 49
NC 50
NC 51
NC 52
NC 53
NET BUS REQ 54
HIFRDY 55
P SAVE L 56
NC 57
P SAVE H 58

C7596 47P
C7597 0.01
C7598 47P
C7599 0.1
C7600 47P
C7601 0.1
R7549 510
R7550 2K
R7551 2K
R7599 47K
TL7516
C7595 0.1
LB7501 J0JCC0000060
C7602 0.01
R7548 10K
TL7504
R7570 100K
CL7501
CL7502
R7633 22K
R7561 3.9K
R7556 100
C7609 1P
C7610 1P
R7557 100
R7588 4.7K
C7620 0.01
C7650 0.01
C7604 0.1
L7508 VWJ0023=5
R7585 22K
K7509 0
R7629 100
R7628 100
R7562 100
R7563 100

TO P7801
FRONT(R)P.C.B.
P7504

KEYIN2	1
KEYIN3	2
KEYIN1	3
TWARP LED H	4
HDD SEL LED H	5
N SW 5V	6
DVD SEL LED H	7
	8
	9
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IR	11
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DMR-E85HP/PC
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

E

DP7501
A2BD00000074
(DISPLAY)

TL7501

TL7502

Q7517
2SD132800L
(FIP CONTROL)

IC7502
C0HBB0000033
(DISPLAY DRIVE)

QR7507
UNR511300L
(FILAMENT Ⓛ :ON)

T7501
ETS13TB119AP
(TRANSFORMER)

Q7503
2SD1994BR1VT
(POWER SAVE Ⓗ :ON)

Q7504
2SD0601A0L
(POWER SAVE Ⓗ :ON)

IP7501
D4FAR4000001

IC7503
C0EBJ0000110
(RESET)

IC7505
C0EBE0000194
(SYS PFAIL Ⓘ OUT)

QR7502
UNR521200L
(INV.)

IC7506
C0ABBA000146
(FAN MOTOR DRIVE)

Q7512
2SD0874A0L
(FAN MOTOR SWITCH)

TO FAN MOTOR
P7503
1 FANDCOUT
2 GND
3 FANLOCK

<XSW 5.2V>
<NSW 5V>

DMR-E85HP/PC
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

DMR-E85HP/PC
Timer Section(Main P.C.B.(5/5))
Schematic Diagram(T)

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

IC3501
MN88302
(RTSC)

DMR-E85HP/PC Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/5)) Schematic Diagram(TR)

H

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

IC3501
MN88302
(RTSC)

IC3502
C3ABRG000036
(16bit/256M SDRAM)

QR3503
UNR521300L
(RESET)

QR3502
UNR521300L
(RESET)

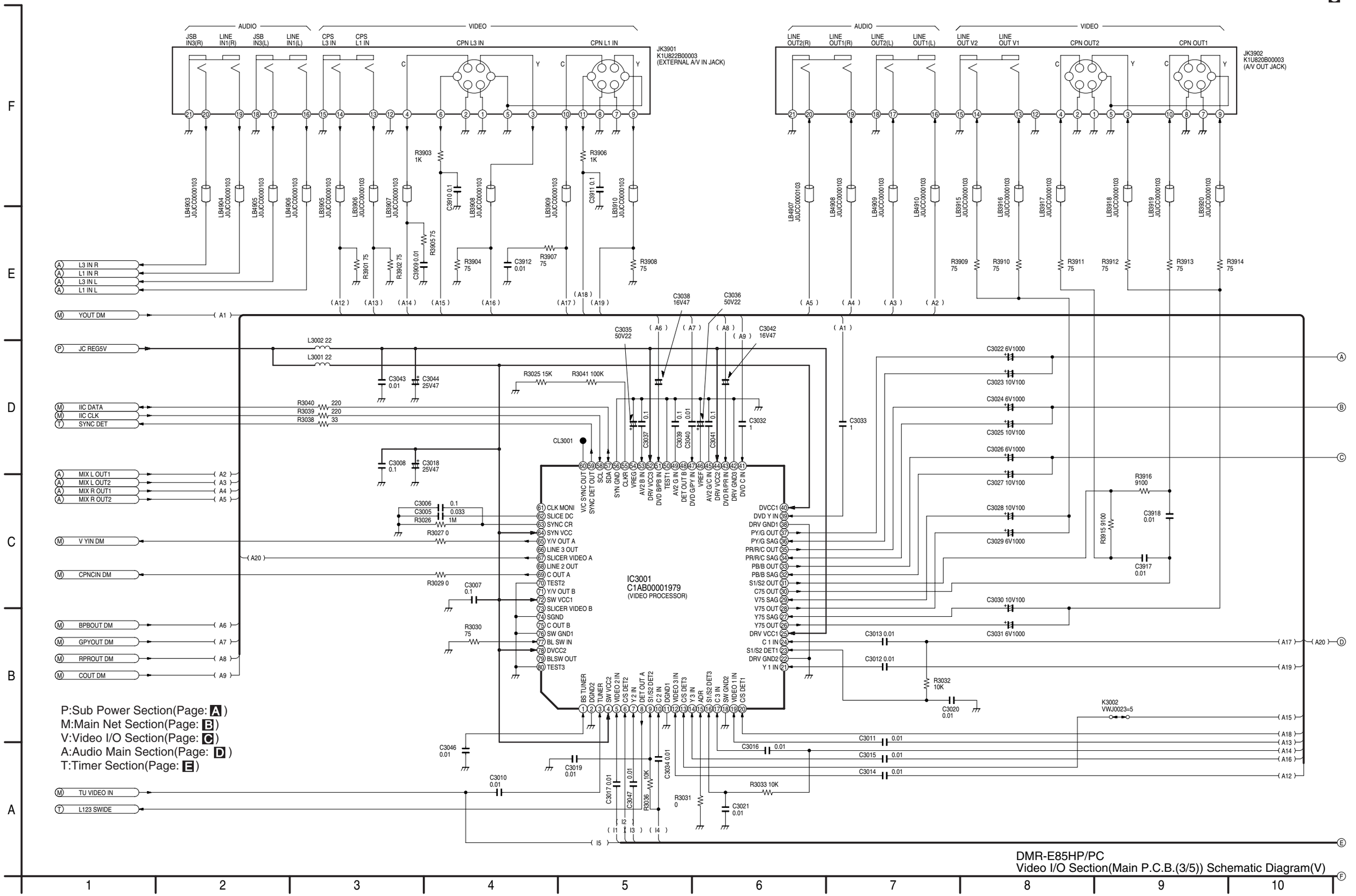
TO DVD RAM DRIVE UNIT
FP3501

DMR-E85HP/PC
Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/5))
Schematic Diagram (TR)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/5))
Schematic Diagram (TR)

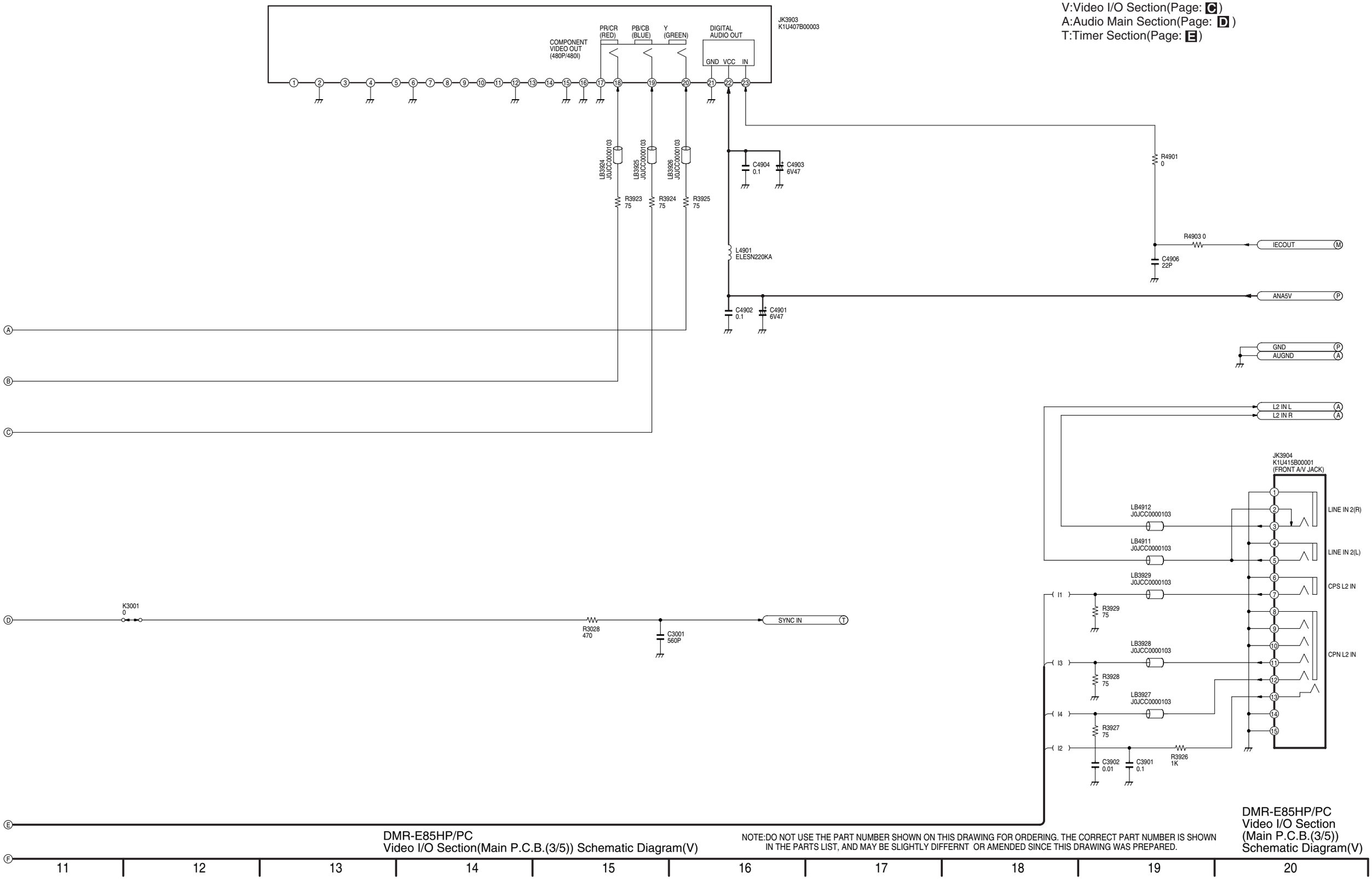
13 14 15 16 17 18 19 20 21 22 23 24 25



DMR-E85HP/PC
Video I/O Section(Main P.C.B.(3/5)) Schematic Diagram(V)

C

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)



DMR-E85HP/PC
Video I/O Section(Main P.C.B.(3/5)) Schematic Diagram(V)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Video I/O Section
(Main P.C.B.(3/5))
Schematic Diagram(V)

11 12 13 14 15 16 17 18 19 20

Ref No.	IC1502						IC1505									IC1506				
MODE	1	2	3	4	5		1	2	3	4	5	6	7	8		1	2	3	4	5
REC	6.0	4.9	5.0	-	0		5.2	-	0	3.3	6.0	-	-	6.0		1.2	0	4.9	6.0	5.0
PLAY	6.0	4.9	5.0	-	0		5.2	-	0	3.3	6.0	-	-	6.0		1.2	0	4.9	6.0	5.0
STOP	6.0	4.9	5.0	-	0		5.2	-	0	3.3	6.0	-	-	6.0		1.2	0	4.9	6.0	5.0
Ref No.	IC1507									IC1508						IC1509				
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5		1	2	3	4	5
REC	5.0	-	0	3.1	4.9	-	-	6.0		6.0	4.9	3.3	-	0		1.8	3.3	1.2	1.0	0
PLAY	5.0	-	0	3.1	4.9	-	-	6.0		6.0	4.9	3.3	-	0		1.8	3.3	1.2	1.0	0
STOP	5.0	-	0	3.1	4.9	-	-	6.0		6.0	4.9	3.3	-	0		1.8	3.3	1.2	1.0	0
Ref No.	IC1510																			
MODE	1	2	3	4	5	6	7	8												
REC	1.5	0.8	3.3	3.3	0	0	1.8	1.8												
PLAY	1.5	0.8	3.3	3.3	0	0	1.8	1.8												
STOP	1.5	0.8	3.3	3.3	0	0	1.8	1.8												
Ref No.	IC3001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	1.3	0	2.1	4.9	1.3	4.8	1.4	4.6	0.1	2.6	0	1.3	4.8	1.3	0	0.1	2.6	0	1.7	4.8
PLAY	1.4	0	2.1	4.9	1.4	4.8	1.4	4.6	0.1	2.6	0	1.4	4.8	1.4	0	0.1	2.6	0	1.8	4.8
STOP	1.3	0	2.1	4.9	1.3	4.8	1.3	4.6	0.1	2.6	0	1.3	4.8	1.3	0	0.1	2.6	0	1.8	4.8
Ref No.	IC3001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	1.3	0	0.1	2.6	4.9	1.6	1.6	1.8	1.8	2.1	0	2.1	2.1	2.1	2.1	1.6	1.5	0	1.8	4.9
PLAY	1.4	0	0.1	2.6	4.9	1.6	1.6	1.8	1.8	2.1	0	2.1	2.1	2.1	2.1	1.6	1.5	0	1.8	4.9
STOP	1.3	0	0.1	2.6	4.9	1.6	1.6	1.8	1.8	2.1	0	2.1	2.1	2.1	2.1	1.6	1.5	0	1.8	4.9

Ref No.	IC3001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	2.7	0	2.7	4.9	2.7	2.7	1.7	4.6	2.7	0	2.7	4.9	2.7	2.9	1.0	0	4.9	4.9	4.9	0.1
PLAY	2.7	0	2.7	4.9	2.7	2.7	1.8	4.6	2.7	0	2.7	4.9	2.7	2.9	1.0	0	4.9	4.9	4.9	0.1
STOP	2.7	0	2.7	4.9	2.7	2.7	1.7	4.6	2.7	0	2.7	4.9	2.7	3.0	1.0	0	4.9	4.9	4.9	0.1
Ref No.	IC3001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	0.8	0.8	4.9	1.2	0	1.6	0	2.0	0	-	4.9	-	0	-	0	0	4.9	0	0
PLAY	0	1.6	0.8	4.9	1.6	0	1.6	0	2.0	0	-	4.9	-	0	-	0	0	4.9	0	0
STOP	0	0.8	0.8	4.9	1.2	0	1.6	0	2.0	0	-	4.9	-	0	-	0	0	4.9	0	0
Ref No.	IC4001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	-	4.4	4.4	-	-	4.4	4.4	3.4	4.4	4.4	4.4	4.4	4.4	4.4	0	4.4	0	4.4	0	4.9
PLAY	-	4.4	4.4	-	-	4.4	4.4	3.4	4.4	4.4	4.4	4.4	4.4	4.4	0	4.4	0	4.4	0	4.9
STOP	-	4.4	4.4	-	-	4.5	4.5	3.4	4.4	4.4	4.4	4.4	4.4	4.4	0	4.5	0	4.4	0	4.9
Ref No.	IC4001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
REC	4.9	0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	8.9	4.4	4.4								
PLAY	4.9	0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	8.9	4.4	4.4								
STOP	4.9	0	4.5	4.4	4.4	4.4	4.4	4.4	4.5	8.9	4.4	4.4								
Ref No.	IC4004						IC4005						IC7404							
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	6	7	8
REC	4.9	0	1.2	4.9	6.0		4.9	0	1.2	8.9	13.1		0	2.5	1.9	0	2.8	2.5	3.3	5.0
PLAY	4.9	0	1.2	4.9	6.0		4.9	0	1.2	8.9	13.4		0	2.5	1.9	0	2.8	2.5	3.3	5.0
STOP	4.9	0	1.2	4.9	6.0		4.9	0	1.2	8.9	13.4		0	2.5	1.9	0	2.8	2.5	3.3	5.0
Ref No.	IC7501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	4.9	4.9	0	4.1	3.9	4.4	0	0	0.4	0.5	4.8	1.6	0	2.1	4.9	4.9	5.0	0	0.3	4.9
PLAY	4.9	4.9	0	3.9	3.9	4.4	0	0	0.4	0.5	4.8	1.6	0	2.1	4.9	4.9	5.0	0	0.3	4.9
STOP	5.0	4.9	0	3.9	3.9	4.4	0	0	0.4	0.6	4.8	1.6	0	2.1	5.0	5.0	5.0	0	0.3	4.9
Ref No.	IC7501																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	0	0	1.8	0	0	0	5.0	0	0	0	1.8	1.7	0	4.9	2.5	0	0.3	4.9	5.0	5.0
PLAY	0	0	1.8	0	0	0	5.0	0	0	0	1.8	1.7	0	4.9	2.5	0	0.3	4.9	5.0	5.0
STOP	0	0	1.8	0	0	0	5.0	0	0	0	1.8	1.7	0	5.0	2.5	0	0.3	5.0	5.0	5.0
Ref No.	IC7501																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	0	0	0	0	0	0	0	0	0	0	0	0	5.0	0	0	4.9	0	0	4.9	4.9
PLAY	0	0	0	0	0	0	0	0	0	0	0	0	5.0	0	0	4.9	0	0	4.9	4.9
STOP	0	0	0	0	0	0	0	0	0	0	0	0	5.0	0	0	4.9	0	0	4.9	5.0
Ref No.	IC7501																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	0	0	2.5	5.0	0	0	0	4.9	5.0	0	0	0	0	4.8	5.0	0	0	4.9	4.9
PLAY	0	0	0	2.5	4.9	0	0	0	5.0	4.9	0	0	0	0	4.8	5.0	0	0	4.9	4.9
STOP	0	0	0	2.5	5.0	0	0	0	5.0	4.9	0	0	0	0	4.8	5.0	0	0	5.0	5.0
Ref No.	IC7501																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
REC	0	5.0	5.0	4.9	5.0	4.9	3.0	4.9	4.9	3.3	0	0	0	4.9	5.0	5.0	5.0	4.9	4.6	0
PLAY	0	5.0	5.0	4.9	5.0	4.9	3.0	4.9	4.9	3.3	0	0	0	4.9	5.0	5.0	5.0	4.9	4.6	0
STOP	0	5.0	5.0	5.0	5.0	4.9	3.0	4.9	4.9	3.3	0	0	0	5.0	5.0	5.0	5.0	5.0	4.6	0
Ref No.	IC7501																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116				
REC	0	0	0	5.0	5.0	4.9	5.0	0	1.7	1.3	0	4.9	1.7	0	0	4.9				
PLAY	0	0	0	5.0	5.0	4.9	5.0	0	1.7	1.3	0	4.9	1.7	0	0	4.9				
STOP	0	0	0	5.0	5.0	5.0	5.0	0	1.8	1.3	0	5.0	1.8	0	0	5.0				
Ref No.	IC7502																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	4.9	3.0	4.4	3.9	0	2.2	2.2	5.0	-28.0	-28.0	-28.0	-28.0	-28.0	-24.4	-24.4	-20.8	-28.0	5.0	-28.0	-28.0
PLAY	4.9	3.0	4.4	3.9	0	2.2	2.2	5.0	-28.0	-28.0	-28.0	-28.0	-28.0	-24.4	-21.4	-20.8	-28.0	5.0	-28.0	-28.0
STOP	5.0	3.0	4.4	3.9	0	2.2	2.2	5.0	-28.0	-28.0	-28.0	-28.0	-28.0	-28.0	-24.4	-20.8	-28.0	5.0	-24.4	-28.0
Ref No.	IC7502																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	-28.0	-28.0	-28.0	-28.0	-24.4	-28.0	-28.0	-28.0	-28.0	-28.0	-28.0	-28.0	-17.2	-17.2	-20.8	-20.8	-20.8	-20.8	-24.4	-24.4
PLAY	-24.4	-28.0	-28.0	-24.4	-24.4	-28.0	-28.0	-28.0	-28.0	-28.0	-28.0	-28.0	-17.2	-17.2	-24.4	-20.8	-24.4	-24.4	-20.8	-20.8
STOP	-28.0	-28.0	-28.0	-24.4	-20.7	-28.0	-28.0	-28.0	-28.0	-28.0	-28.0	-28.0	-20.8	-20.8	-24.4	-20.8	-28.0	-20.8	-24.4	-17.1
Ref No.	IC7502																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	-13.5	-20.6	-28.0	-28.0	-28.0	-28.0	-20.6	-24.3	-20.8	-20.8	-17.1	-28.0	-28.0	-28.0	-28.0	-24.4	-24.4	-24.4	-24.4	-24.4
PLAY	-17.1	-20.6	-28.0	-28.0	-28.0	-24.4	-20.6	-24.4	-17.2	-13.4	-16.8	-28.0	-28.0	-28.0	-28.0	-24.4	-23.9	-23.7	-23.4	-23.3
STOP	-20.7	-17.1	-28.0	-28.0	-28.0	-28.0	-20.6	-24.4	-20.8	-17.2	-17.1	-28.0	-28.0	-28.0	-28.0	-24.4	-24.4	-24.4	-24.4	-24.4
Ref No.	IC7502																			
MODE	61	62	63	64																
REC	-24.4	-24.4	-24.4	-28.4																
PLAY	-24.4	-24.4	-24.4	-28.4																
STOP	-24.4	-24.4	-24.4	-28.4																
Ref No.	IC7503						IC7505						IC7506							
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	6	7	8
REC	4.9	5.2	0	-	-		2.2	3.3	0	-	-		5.8	1.8	1.8	0	1.8	1.8	1.8	13.1
PLAY	4.9	5.2	0	-	-		2.2	3.3	0	-	-		5.8	1.8	1.8	0	1.8	1.8	1.8	13.1
STOP	5.0	5.2	0	-	-		2.2	3.3	0	-	-		5.8	1.8	1.8	0	1.8	1.8	1.8	13.1

Ref No.	Q4001			Q4002			Q4003			Q4004			Q4005		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	5.2	-0.1	5.2	0	0	-0.1	0	0	-0.1	0	0	-0.1	0	0	-0.1
PLAY	5.2	-0.1	5.2	0	0	-0.1	0	0	-0.1	0	0	-0.1	0	0	-0.1
STOP	5.2	-0.1	5.2	0	0	-0.1	0	0	-0.1	0	0	-0.1	0	0	-0.1

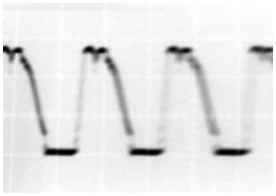
Ref No.	Q7401			Q7503			Q7504			Q7507			Q7508		
MODE	E	C	B	E	C	B	E	C	B	1	2	3	E	C	B
REC	2.7	0	2.0	0	3.4	-1.0	0	-1.0	-1.0	2.3	0	1.6	1.7	5.0	1.6
PLAY	2.7	0	2.1	0	3.2	-0.9	0	-0.9	-1.0	2.3	0	1.6	1.8	5.0	1.6
STOP	2.7	0	2.1	0	3.1	-1.0	0	-1.0	-1.0	2.3	0	1.6	1.8	5.0	1.6

Ref No.	Q7512			Q7517			Q7520		
MODE	1	2	3	1	2	3	E	C	B
REC	5.0	13.1	5.7	-19.8	-19.8	-19.1	0	2.7	0
PLAY	5.0	13.1	5.7	-19.8	-19.8	-19.1	0	2.7	0
STOP	5.0	13.1	5.7	-19.8	-19.8	-19.1	0	2.7	0

Ref No.	QR4001			QR4002			QR4003			QR4004			QR7502		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	0	0	4.9	0	0	2.3	0	5.2	0	0	5.2	0	0	0	2.2
PLAY	0	0	4.9	0	0	2.4	0	5.2	0	0	5.2	0	0	0	2.2
STOP	0	0	4.9	0	0	2.4	0	5.2	0	0	5.2	0	0	0	2.2

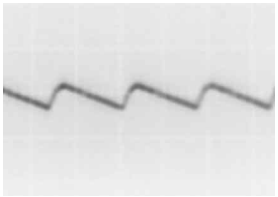
Ref No.	QR7507		
MODE	E	C	B
REC	4.9	4.9	0
PLAY	4.9	4.9	0
STOP	4.9	4.9	0

Ref No.	P9001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	2.0	1.2	0	0	0	0	0	0	0	3.3	0	0	0	0	3.3	0	4.9	1.5	4.9	0
PLAY	2.0	1.2	0	0	0	0	0	0	0	3.3	0	0	0	0	3.3	0	4.9	1.1	4.9	0
STOP	2.0	1.2	0	0	0	0	0	0	0	3.3	0	0	0	0	3.3	0	4.9	1.5	4.9	0
Ref No.	P9001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	4.9	1.1	3.3	0	0	1.0	5.0	0	4.9	1.0	0.1	0	4.9	1.0	5.0	0	5.0	-	4.9	0
PLAY	4.9	1.0	3.3	0	0	1.0	5.0	0	5.0	1.0	0.1	0	5.0	1.0	5.0	0	5.0	-	5.0	0
STOP	4.9	1.1	3.3	0	0	1.0	5.0	0	5.0	1.0	0.1	0	5.0	1.0	5.0	0	5.0	-	4.9	0
Ref No.	P9001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	-	3.3	0	0	3.3	0	3.0	2.5	0	2.5	0	0	0	0	0	0	0	2.4	0	0
PLAY	-	3.3	0	0	3.3	0	3.0	2.5	0	2.5	0	0	0	0	0	0	0	2.4	0	0
STOP	-	3.3	0	0	3.3	0	3.0	2.5	0	2.5	0	0	0	0	0	0	0	2.4	0	0
Ref No.	P9001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	2.5	0	0	4.9	-	0	4.9	5.0	2.3	-	1.6	-	3.3	3.3	3.3	0	1.5	5.0	1.5
PLAY	0	2.5	0	0	5.0	-	0	5.0	5.0	2.4	-	1.6	-	3.3	3.3	3.3	0	1.5	5.0	1.5
STOP	0	2.5	0	0	5.0	-	0	4.9	5.0	2.4	-	1.6	-	3.3	3.3	3.3	0	1.5	5.0	1.5
Ref No.	P9001																			
MODE	81	82	83	84	85	86	87	88												
REC	6.0	1.2	5.0	1.5	6.0	1.2	6.0	1.2												
PLAY	6.0	1.2	5.0	1.5	6.0	1.2	6.0	1.2												
STOP	6.0	1.2	5.0	1.5	6.0	1.2	6.0	1.2												

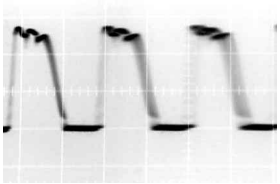


T1151-3 STOP
30Vp-p (5 μ sec.div)

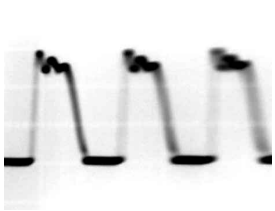
T1151-4 STOP
330Vp-p (5 μ sec.div)



T1151-6 STOP
20Vp-p (5m sec.div)



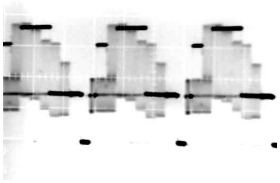
T1151-8 STOP
30Vp-p (5 μ sec.div)



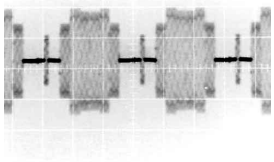
T1151-10 STOP
15Vp-p (5 μ sec.div)

IC1150-1 STOP
8.0Vp-p (5 μ sec.div)

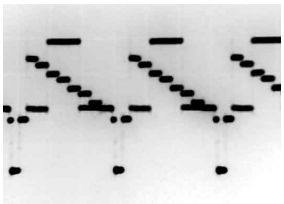
IC1150-2 STOP
0.5Vp-p (5 μ sec.div)



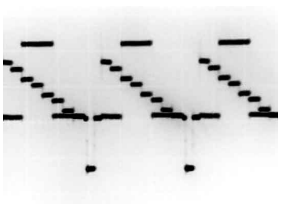
P7402-2 REC/PLAY
0.8Vp-p (20 μ sec.div)



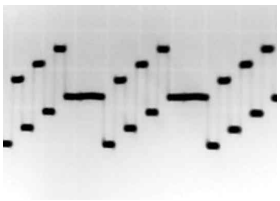
P7402-18 REC/PLAY
0.7Vp-p (20 μ sec.div)



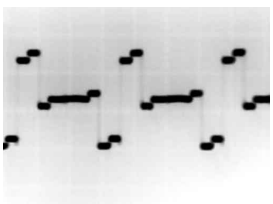
P7402-22 REC/PLAY
0.8Vp-p (20 μ sec.div)



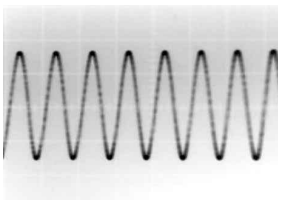
P7402-26 REC/PLAY
0.8Vp-p (20 μ sec.div)



P7402-30 REC/PLAY
0.6Vp-p (20 μ sec.div)

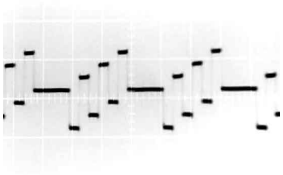


P7402-34 REC/PLAY
0.6Vp-p (20 μ sec.div)

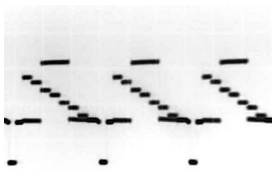


P7402-48,50 REC/PLAY
0.8Vp-p (1m sec.div)

JK3903-18 REC/PLAY
1.2Vp-p (20 μ sec.div)



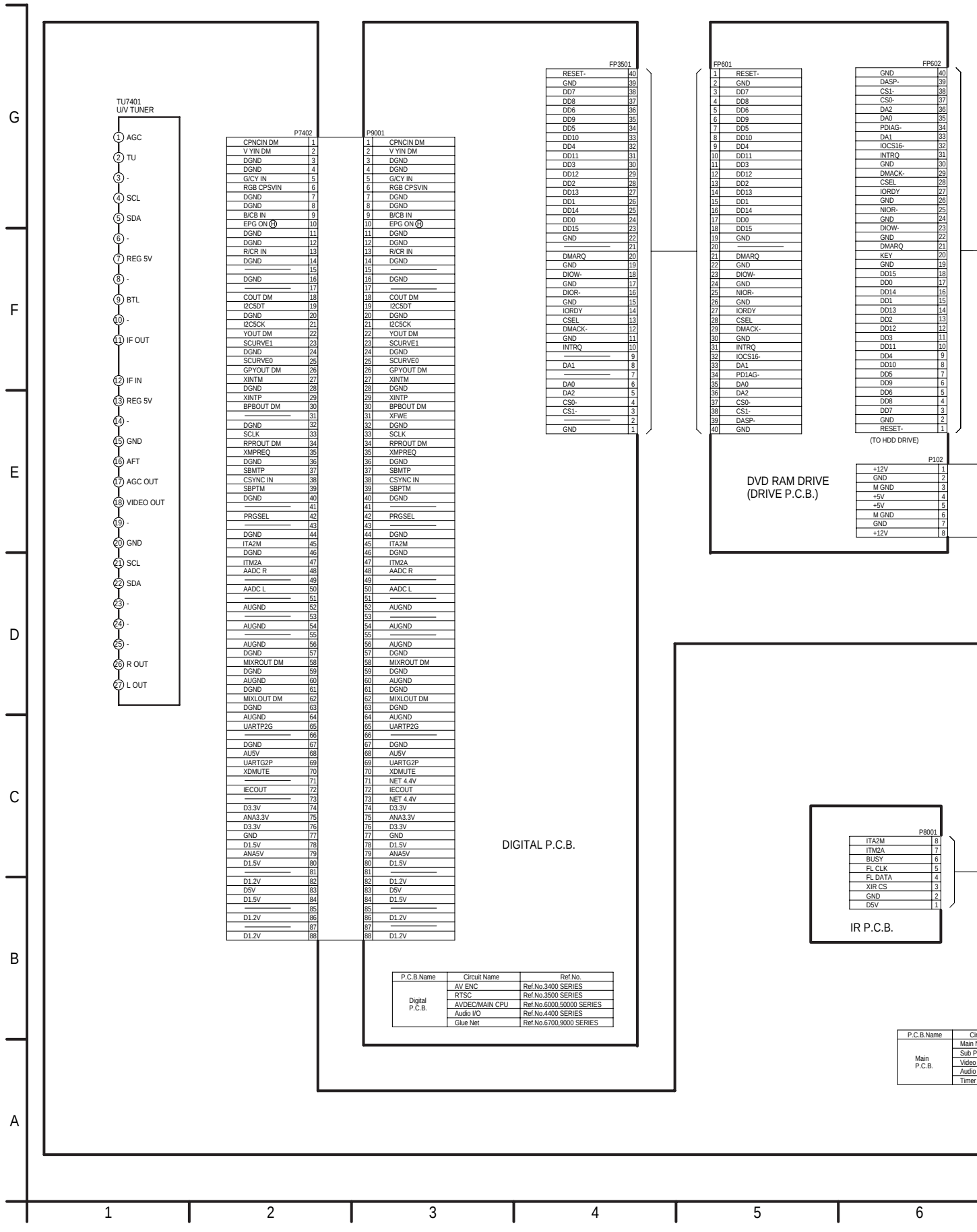
JK3903-19 REC/PLAY
1.2Vp-p (20 μ sec.div)

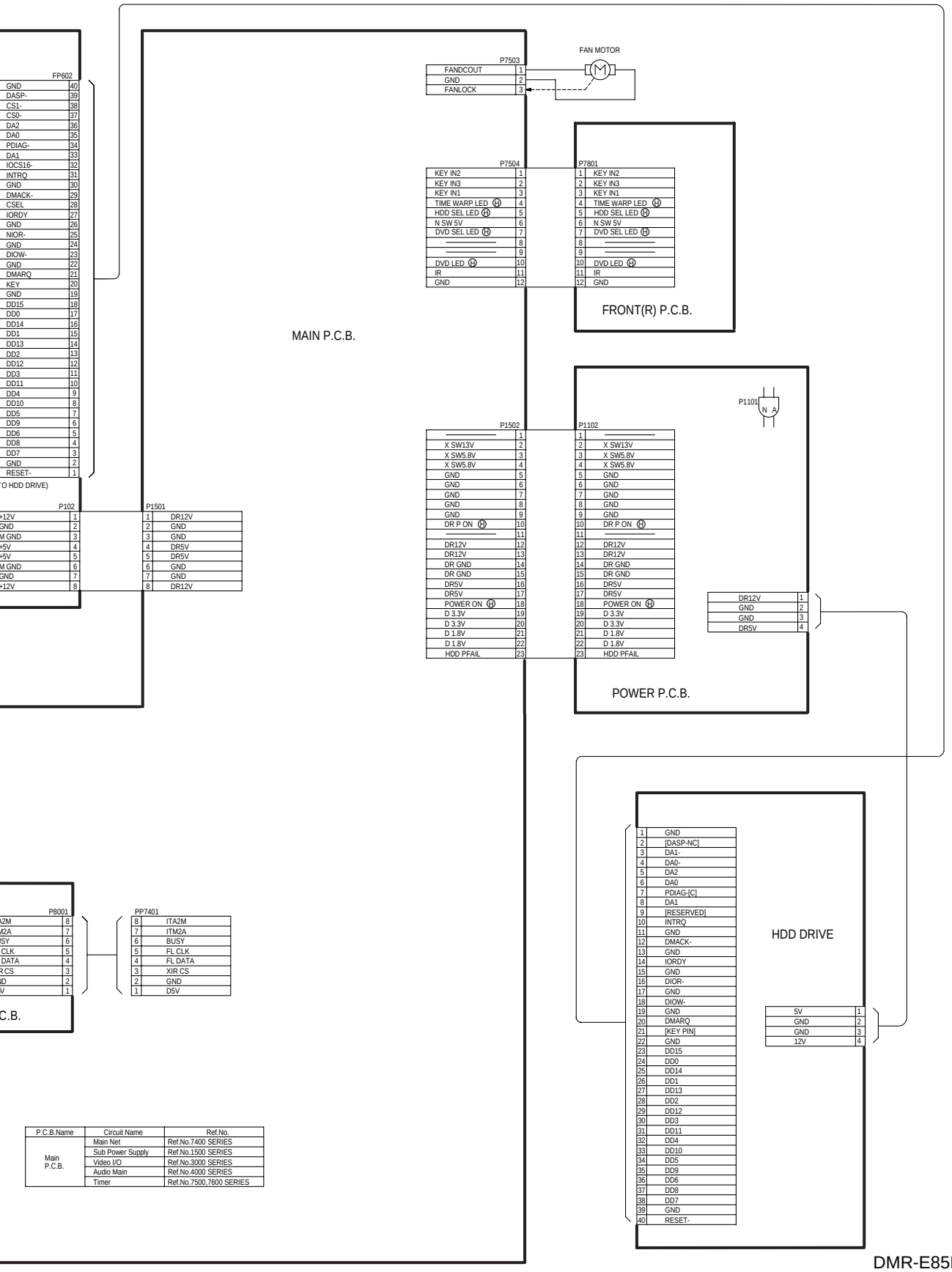


JK3903-20 REC/PLAY
1.5Vp-p (20 μ sec.div)

19 Schematic Diagram

19.1. Interconnection Schematic Diagram



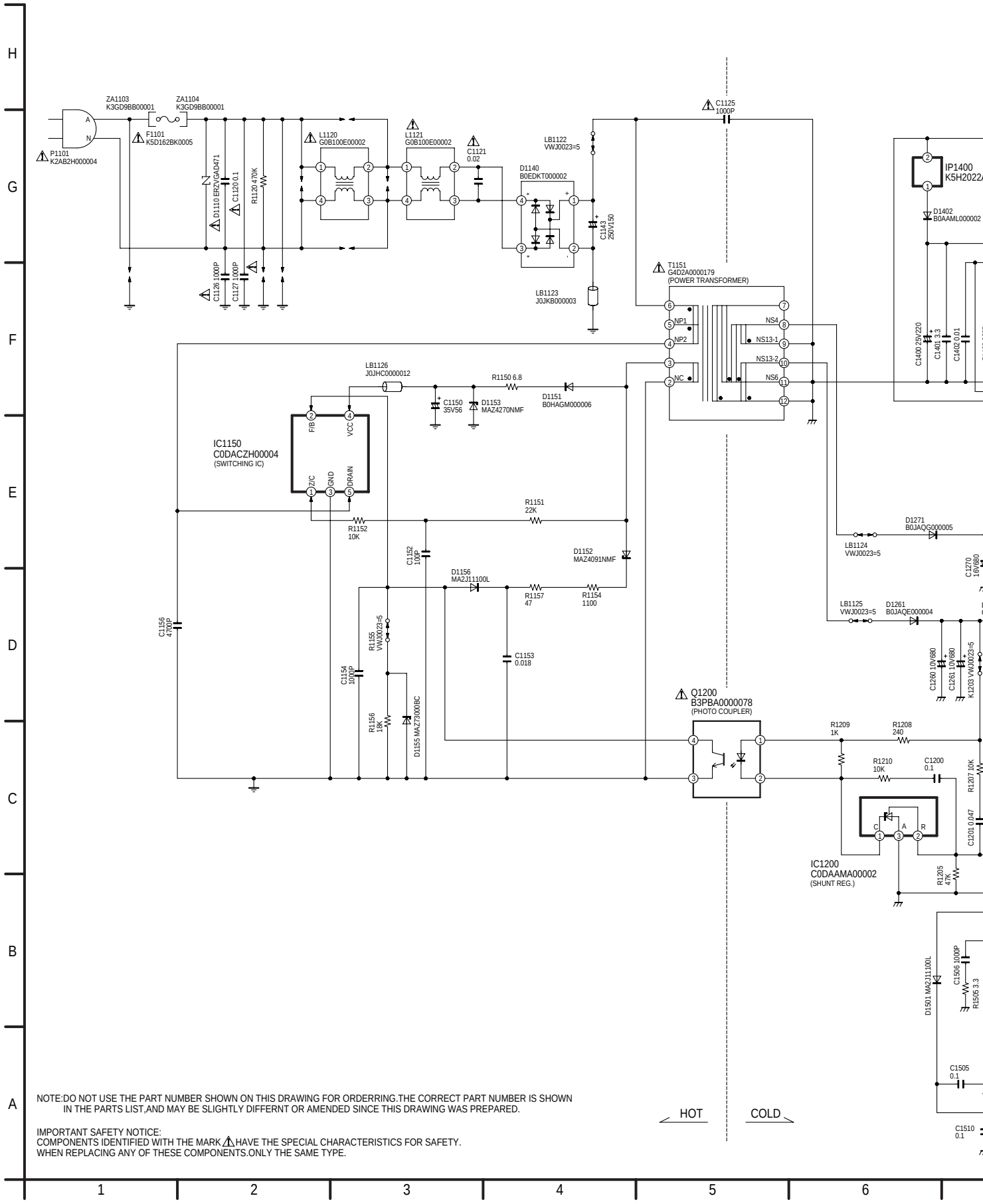


P.C.B.Name	Circuit Name	Ref.No.
Main P.C.B.	Main Net	Ref.No.7400 SERIES
	Sub Power Supply	Ref.No.1500 SERIES
	Video I/O	Ref.No.3000 SERIES
	Audio Main	Ref.No.4000 SERIES
	Timer	Ref.No.7500,7600 SERIES

DMR-E85HP/PC
Interconnection
Schematic Diagram

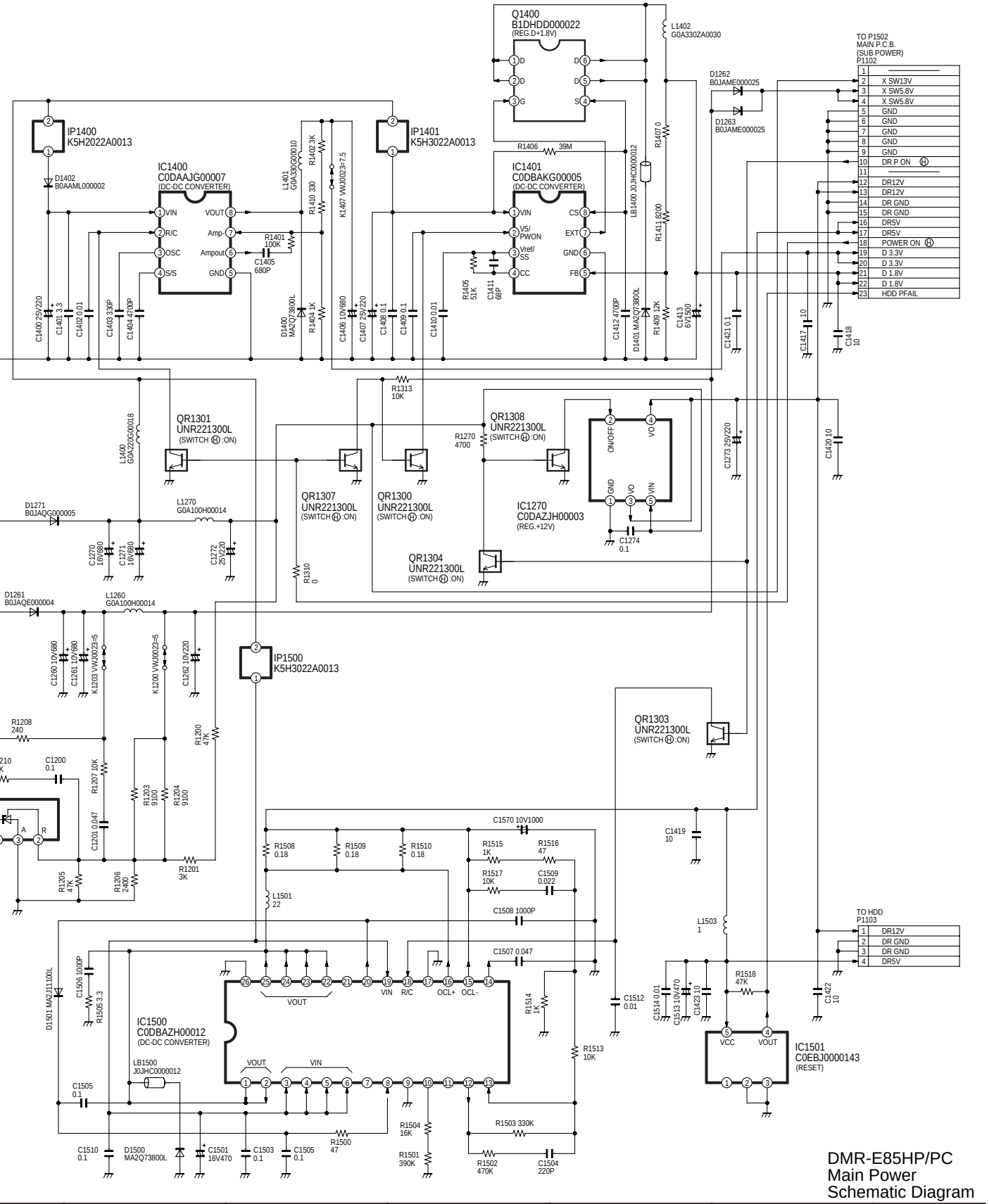
6 7 8 9 10 11

19.2. Main Power Schematic Diagram



NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

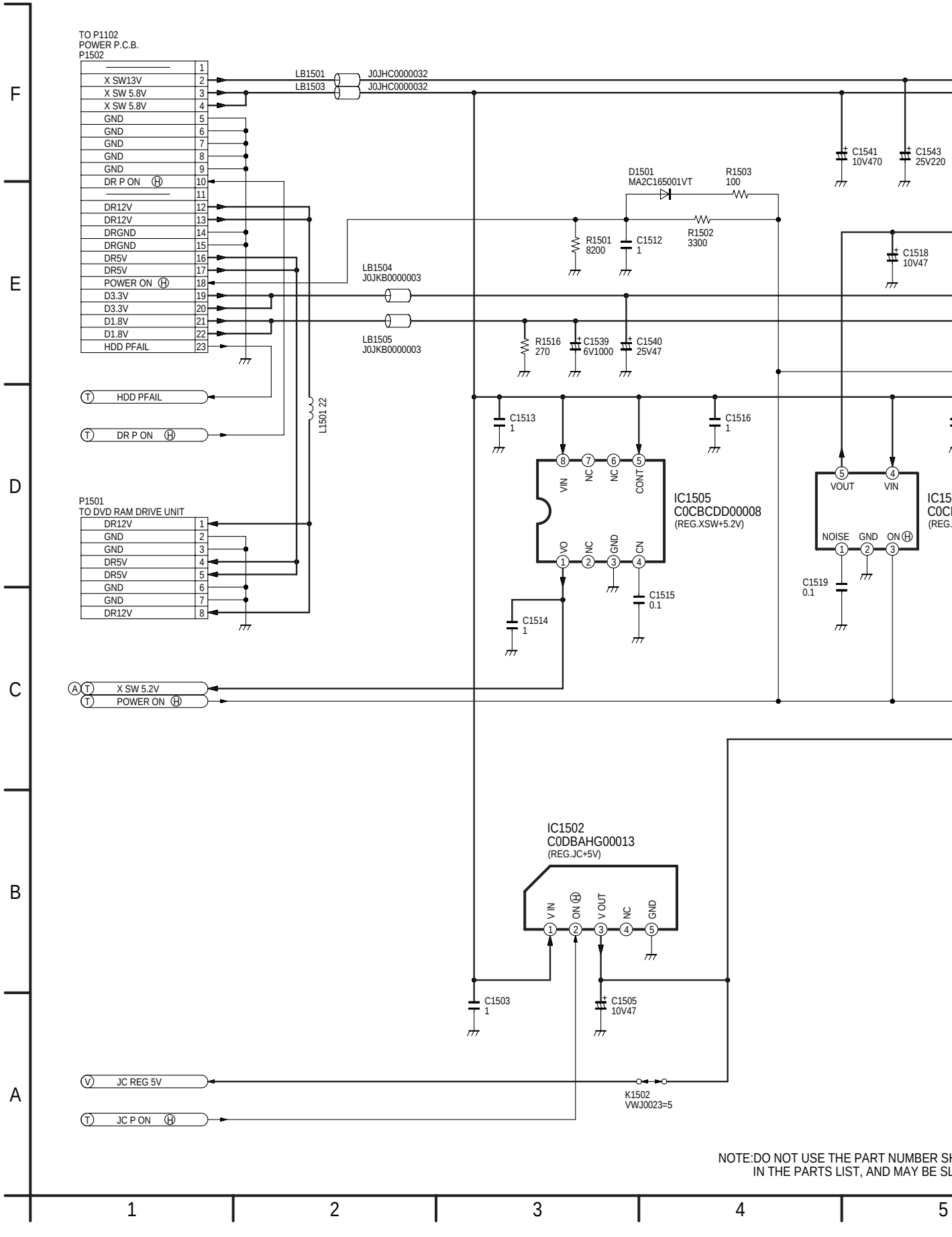
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS.ONLY THE SAME TYPE.

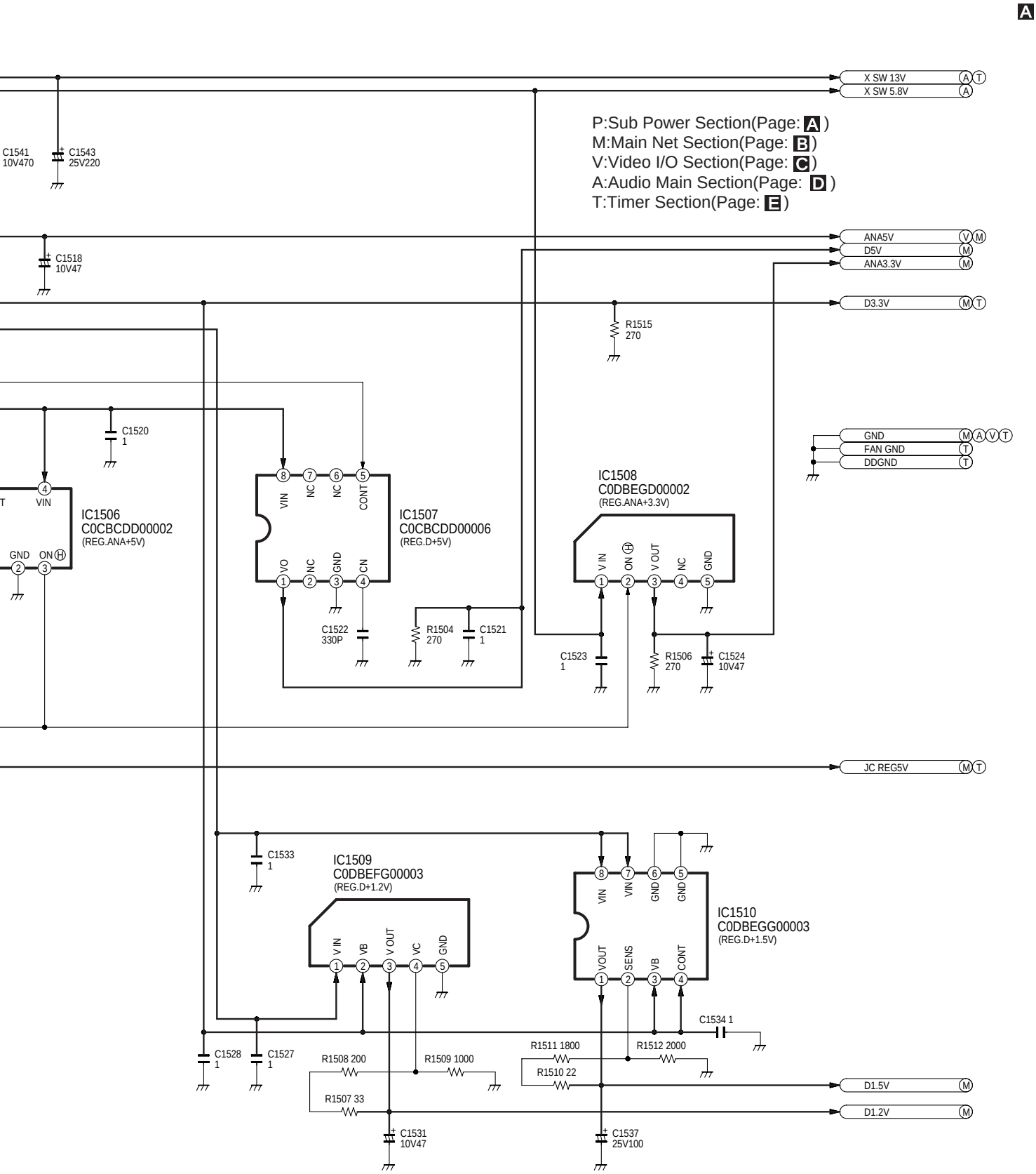


DMR-E85HP/PC
Main Power
Schematic Diagram

7	8	9	10	11	12

19.3. Sub Power Section (Main P.C.B. (1/5)) Schematic Diagram (P)



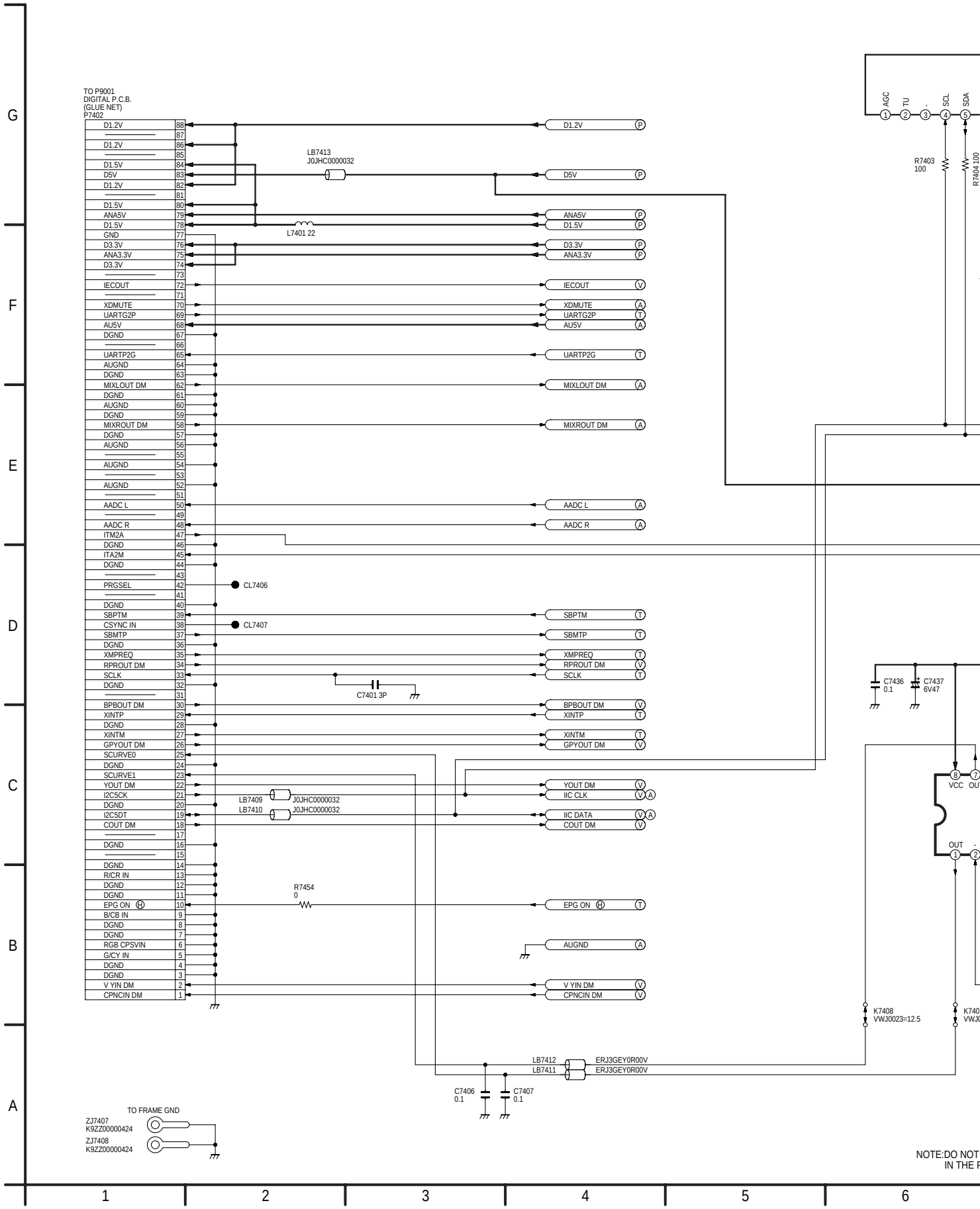


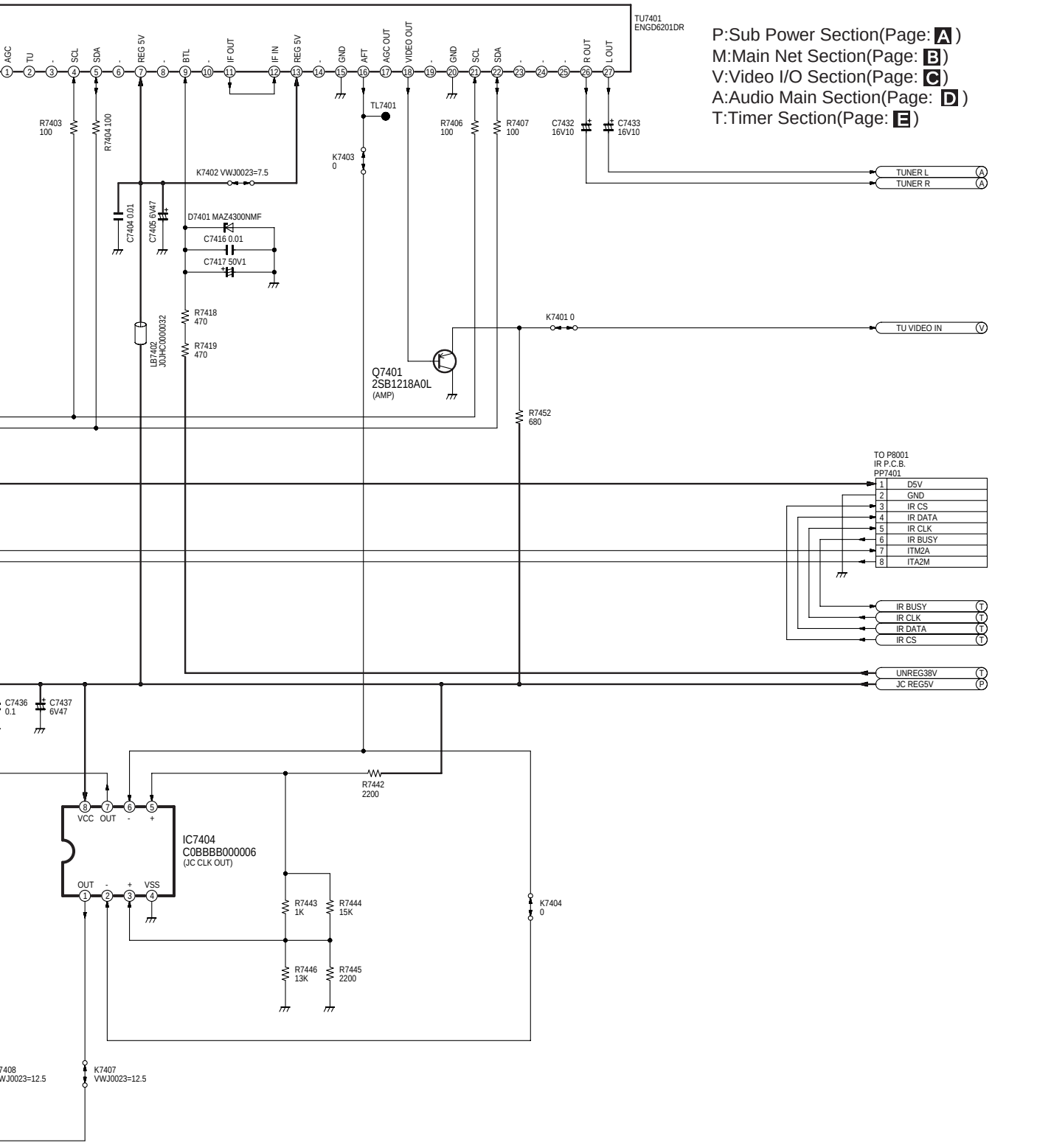
E PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
ST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Sub Power Section (Main P.C.B(1/5))
Schematic Diagram (P)

5 | 6 | 7 | 8 | 9

19.4. Main Net Section (Main P.C.B. (2/5)) Schematic Diagram (M)





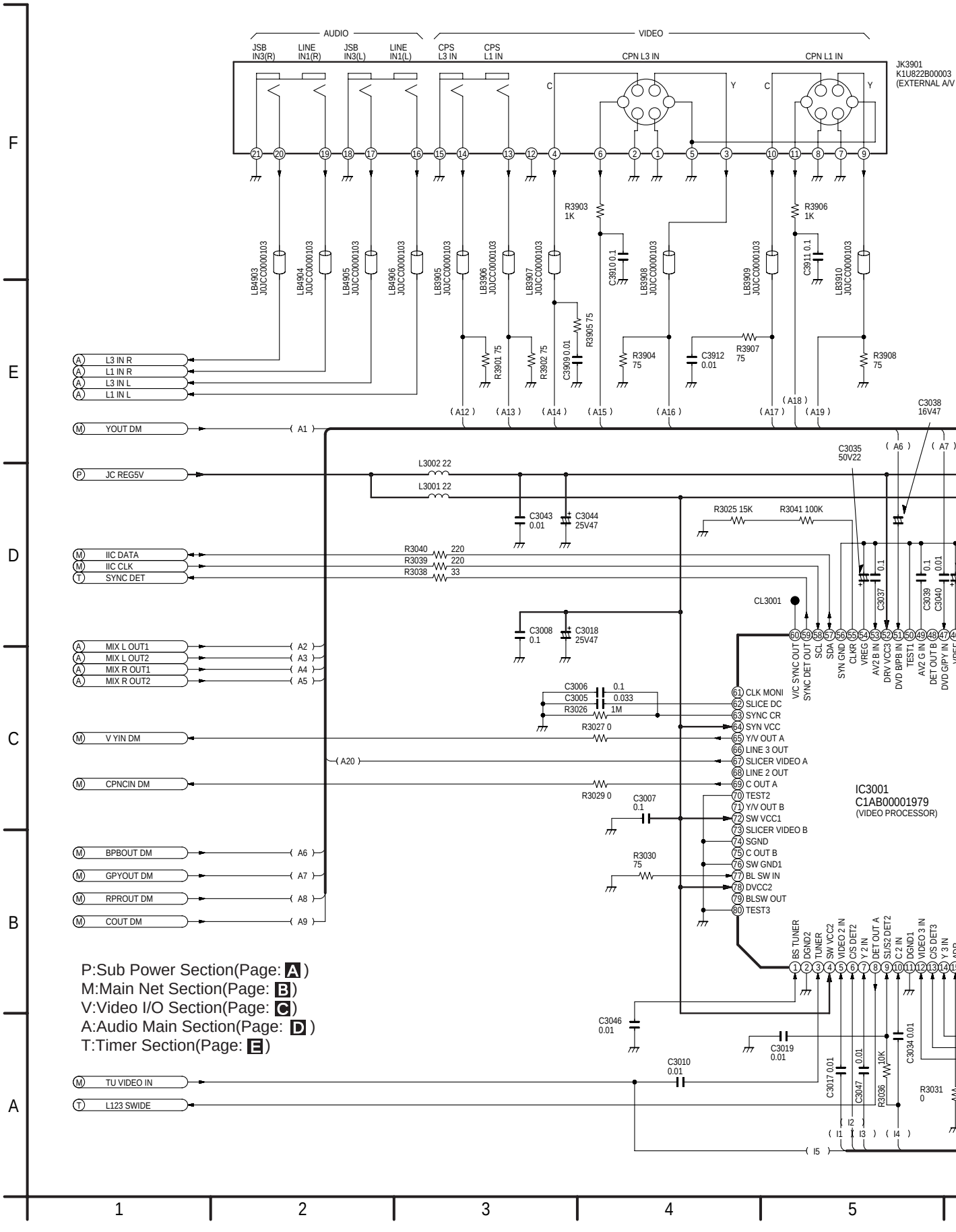
P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

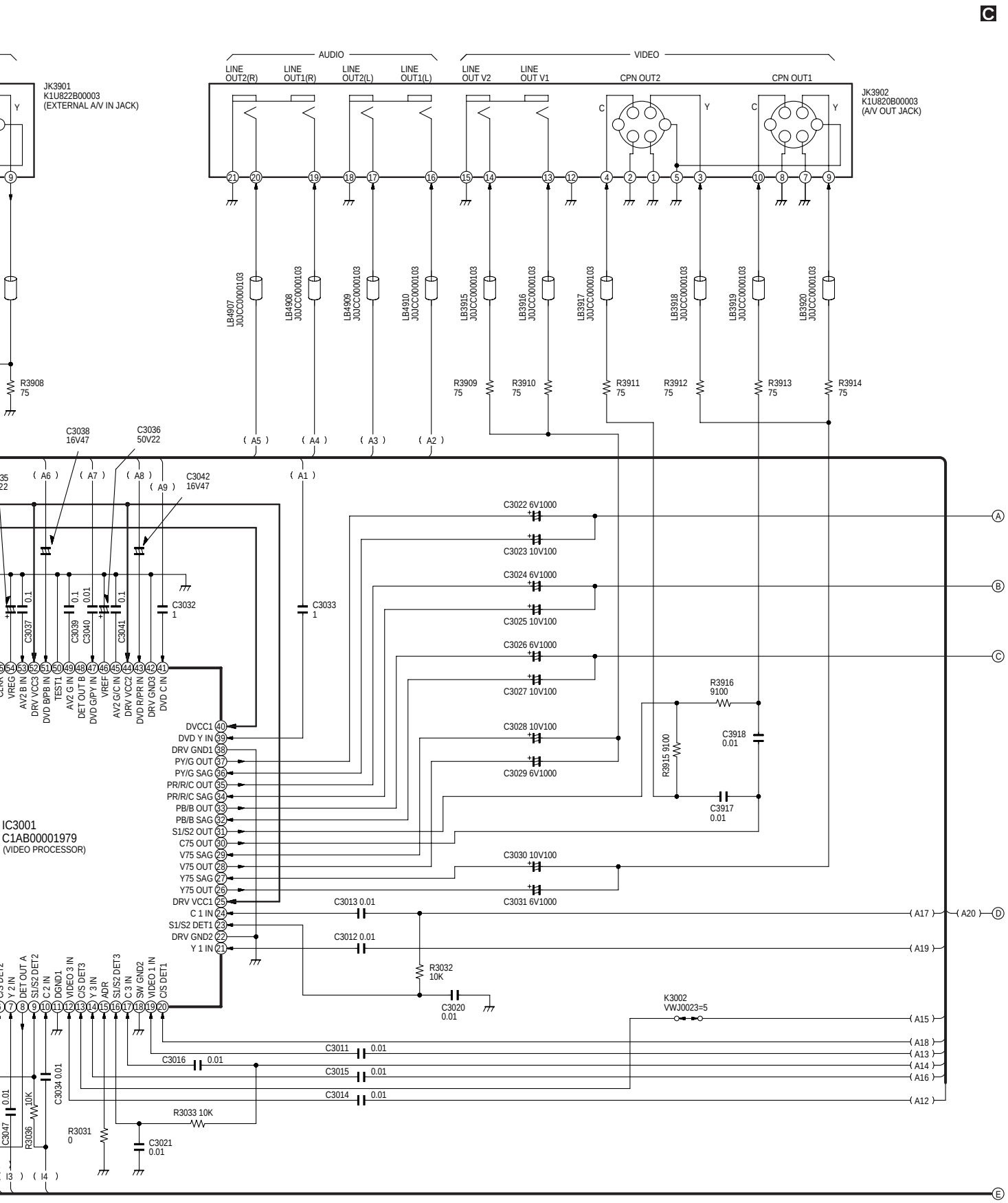
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Main Net Section(Main P.C.B.(2/5))
Schematic Diagram(M)

6	7	8	9	10	11

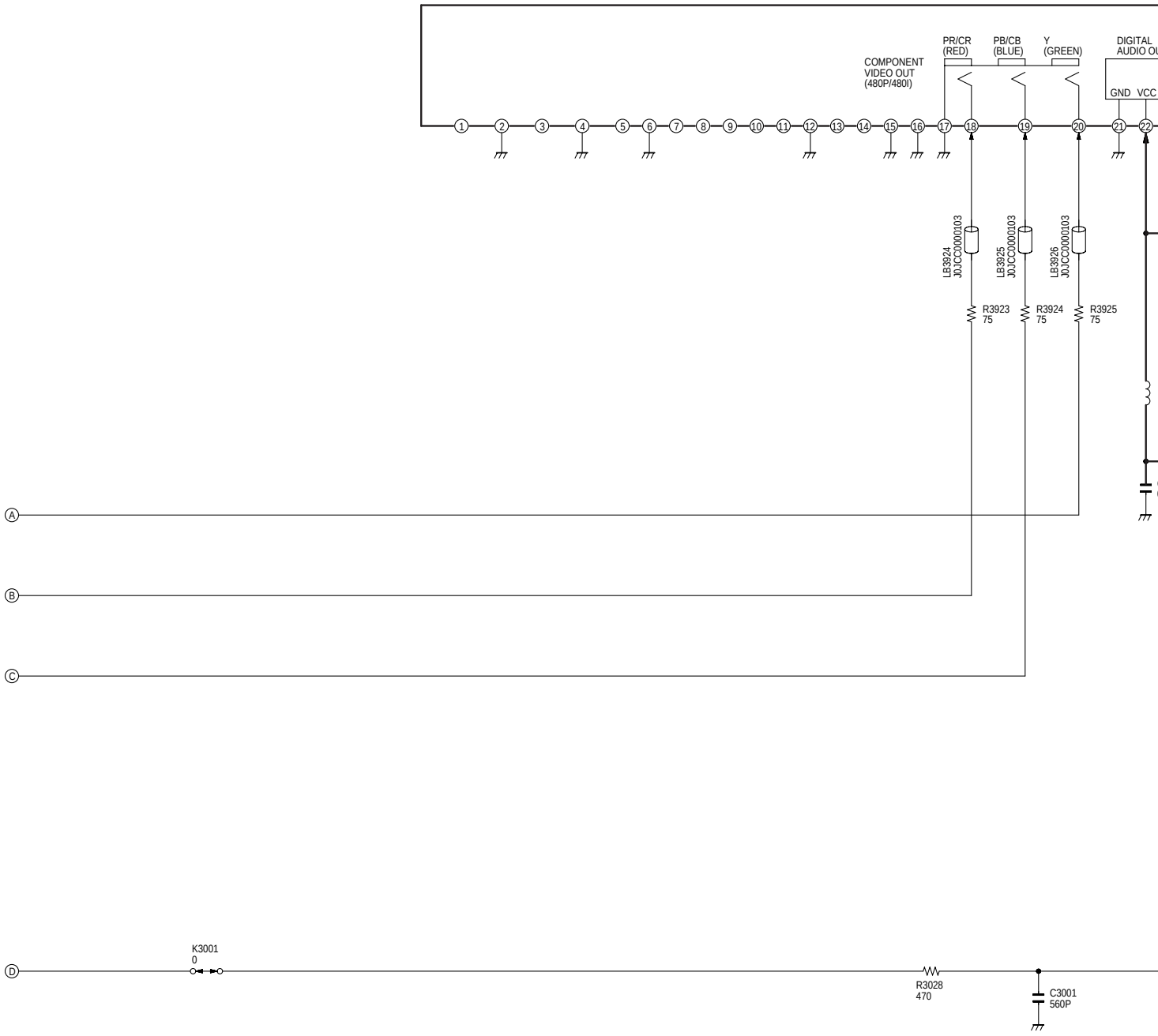
19.5. Video I/O Section (Main P.C.B. (3/5)) Schematic Diagram (V)





DMR-E85HP/PC
Video I/O Section(Main P.C.B.(3/5)) Schematic Diagram(V)

5 | 6 | 7 | 8 | 9 | 10



E

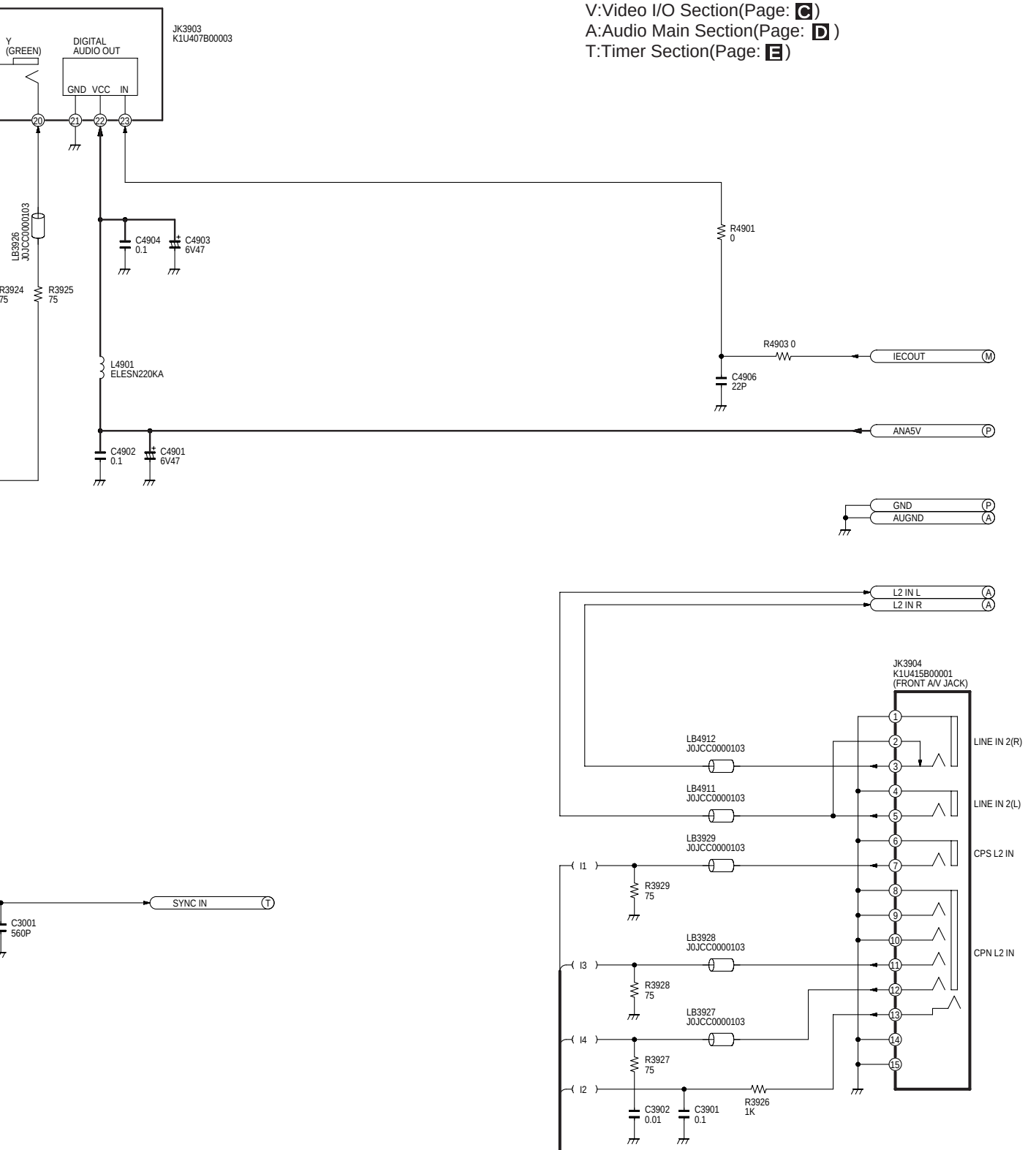
F

DMR-E85HP/PC
Video I/O Section(Main P.C.B.(3/5)) Schematic Diagram(V)

11 | 12 | 13 | 14 | 15

C

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)



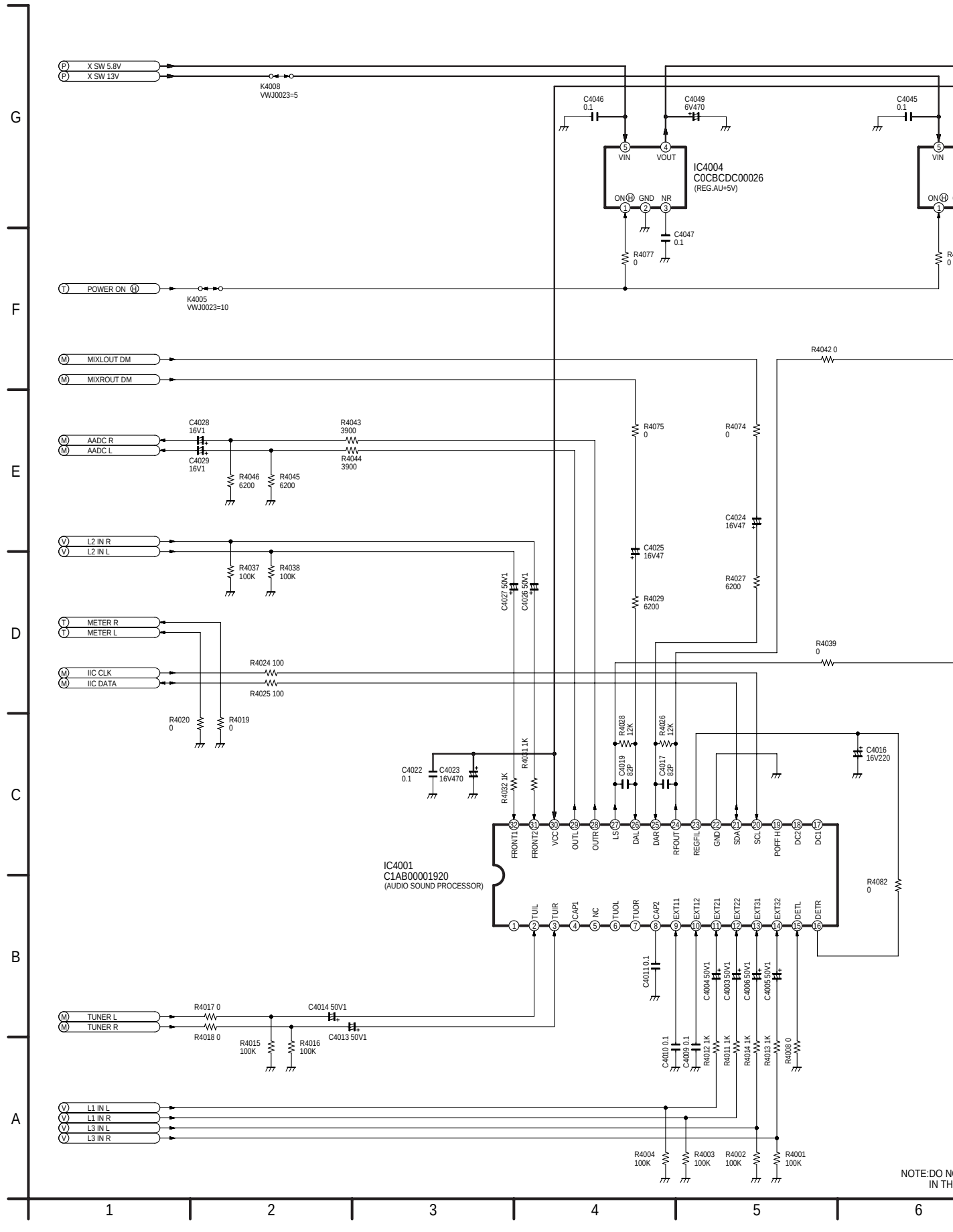
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

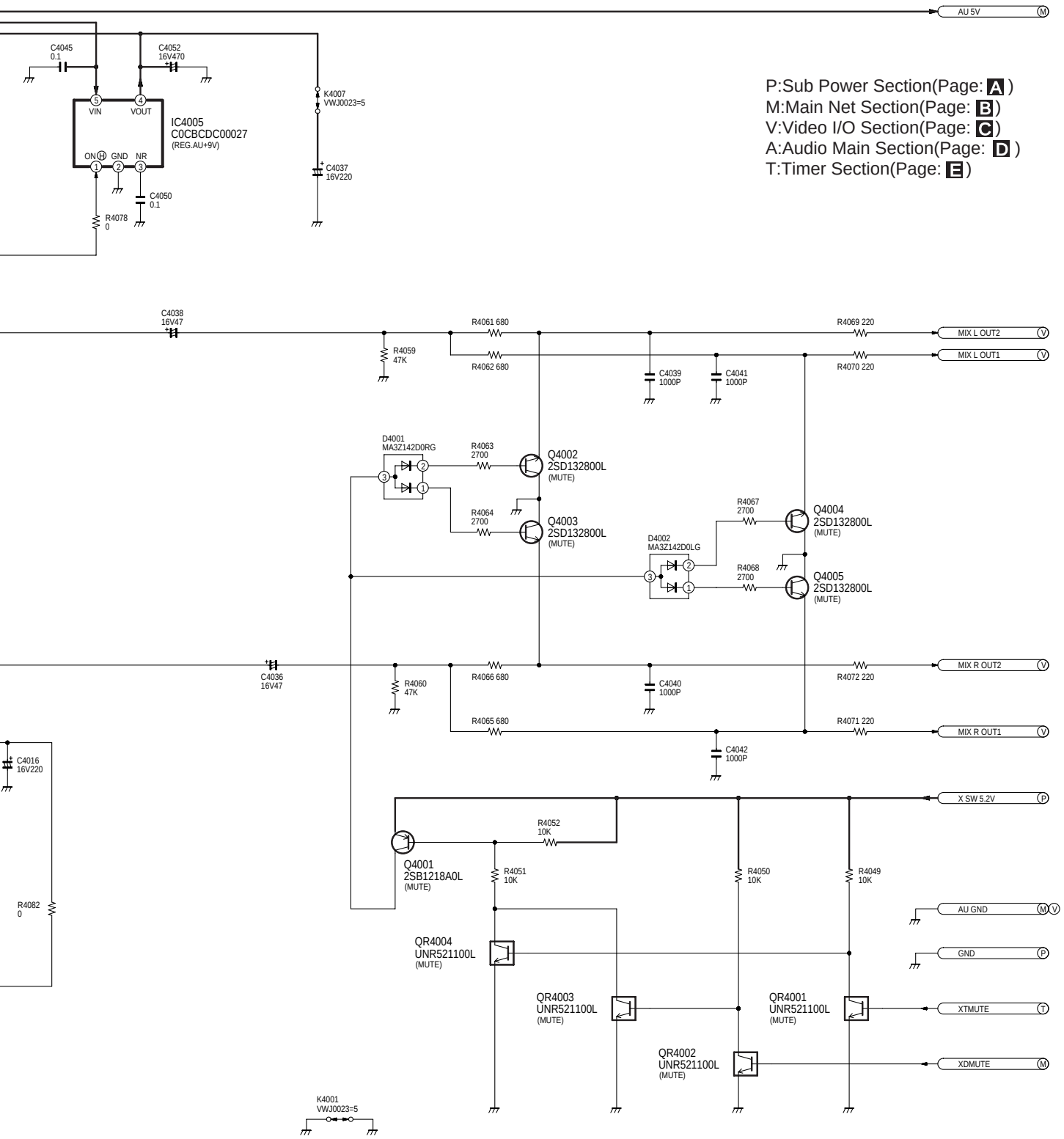
DMR-E85HP/PC
Video I/O Section
(Main P.C.B.(3/5))
Schematic Diagram(V)

gram(V)

16 17 18 19 20

19.6. Audio Main Section (Main P.C.B. (4/5)) Schematic Diagram (A)





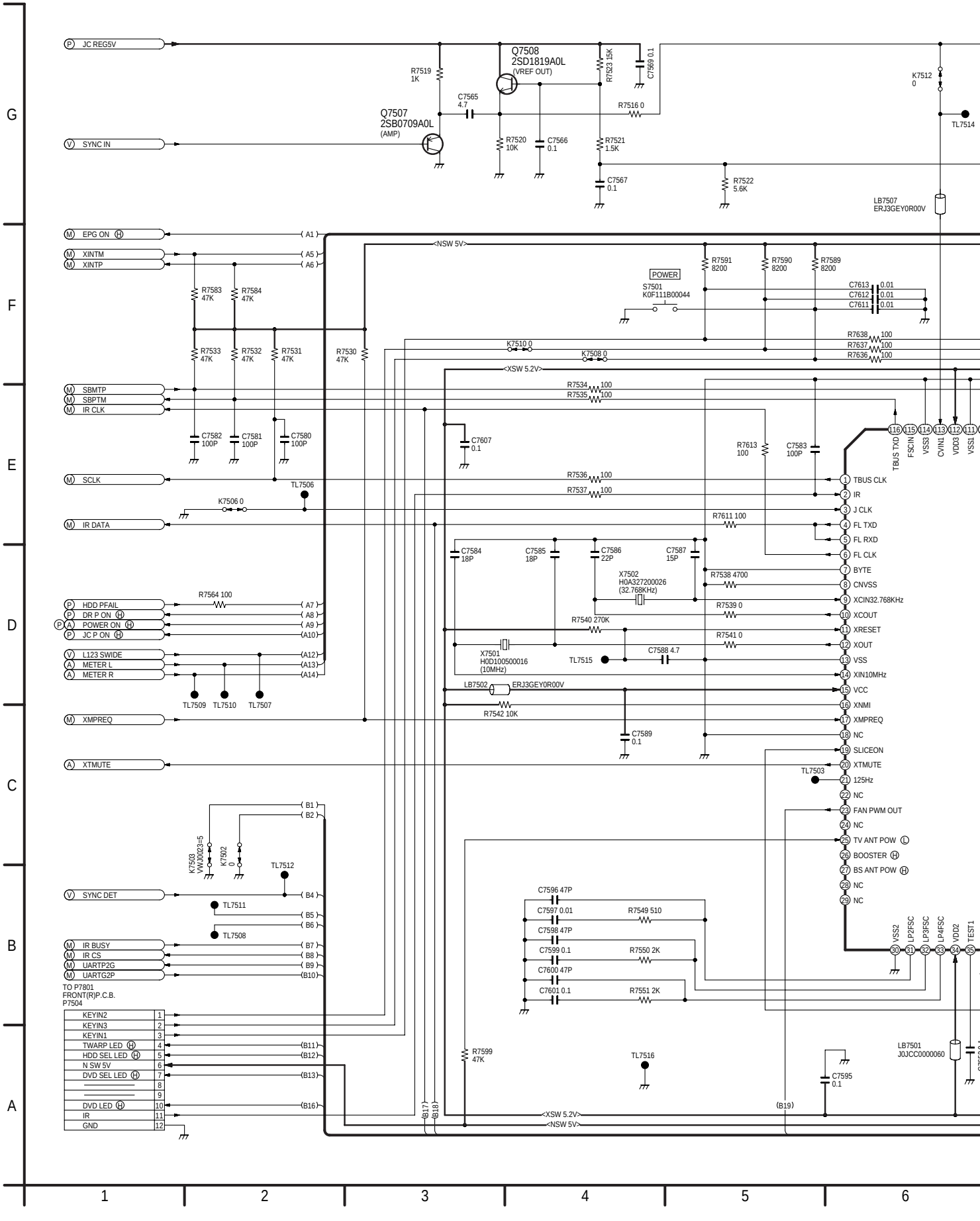
P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

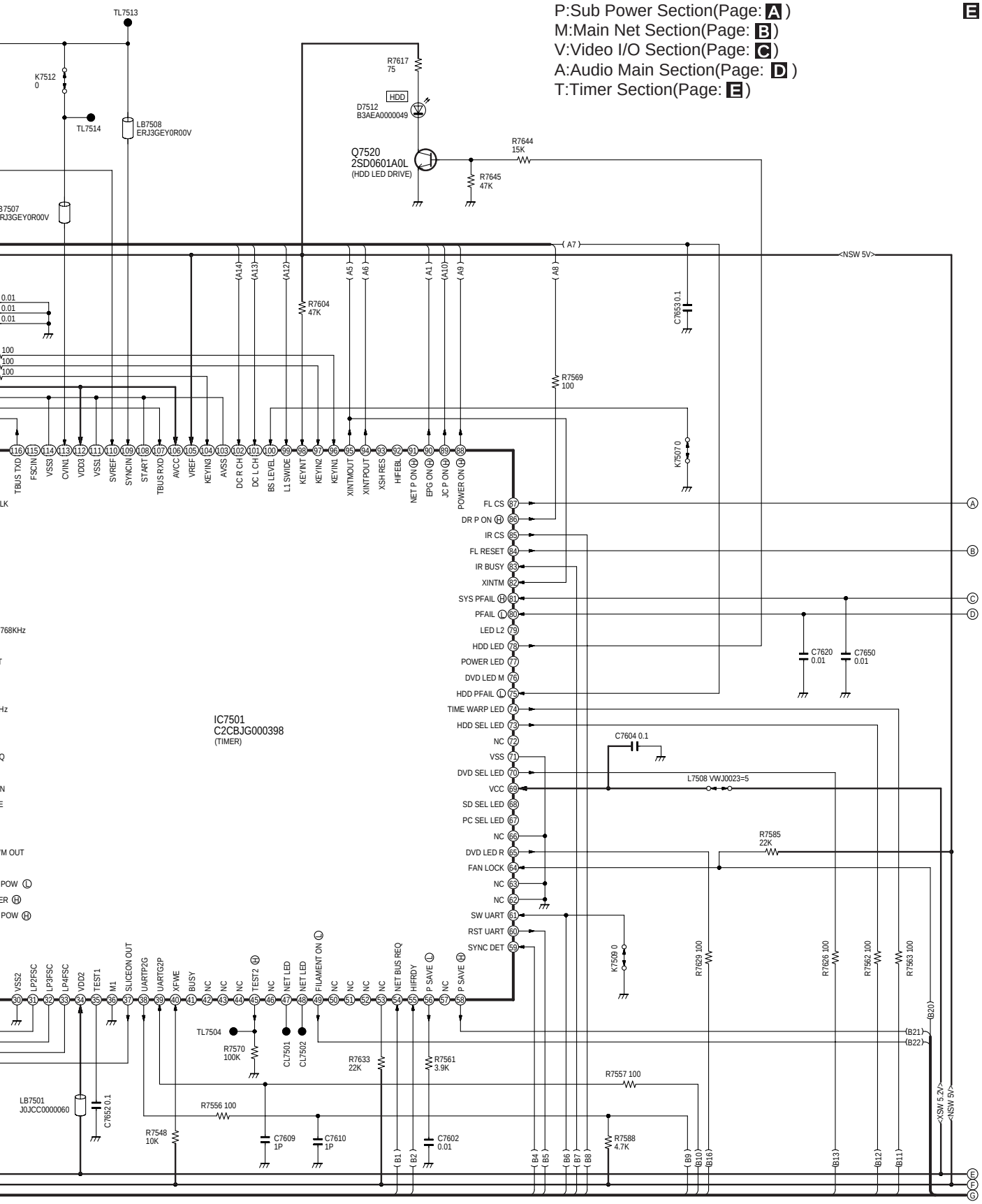
DMR-E85HP/PC
Audio Main Section(Main P.C.B.(4/5))
Schematic Diagram(A)

6	7	8	9	10	11

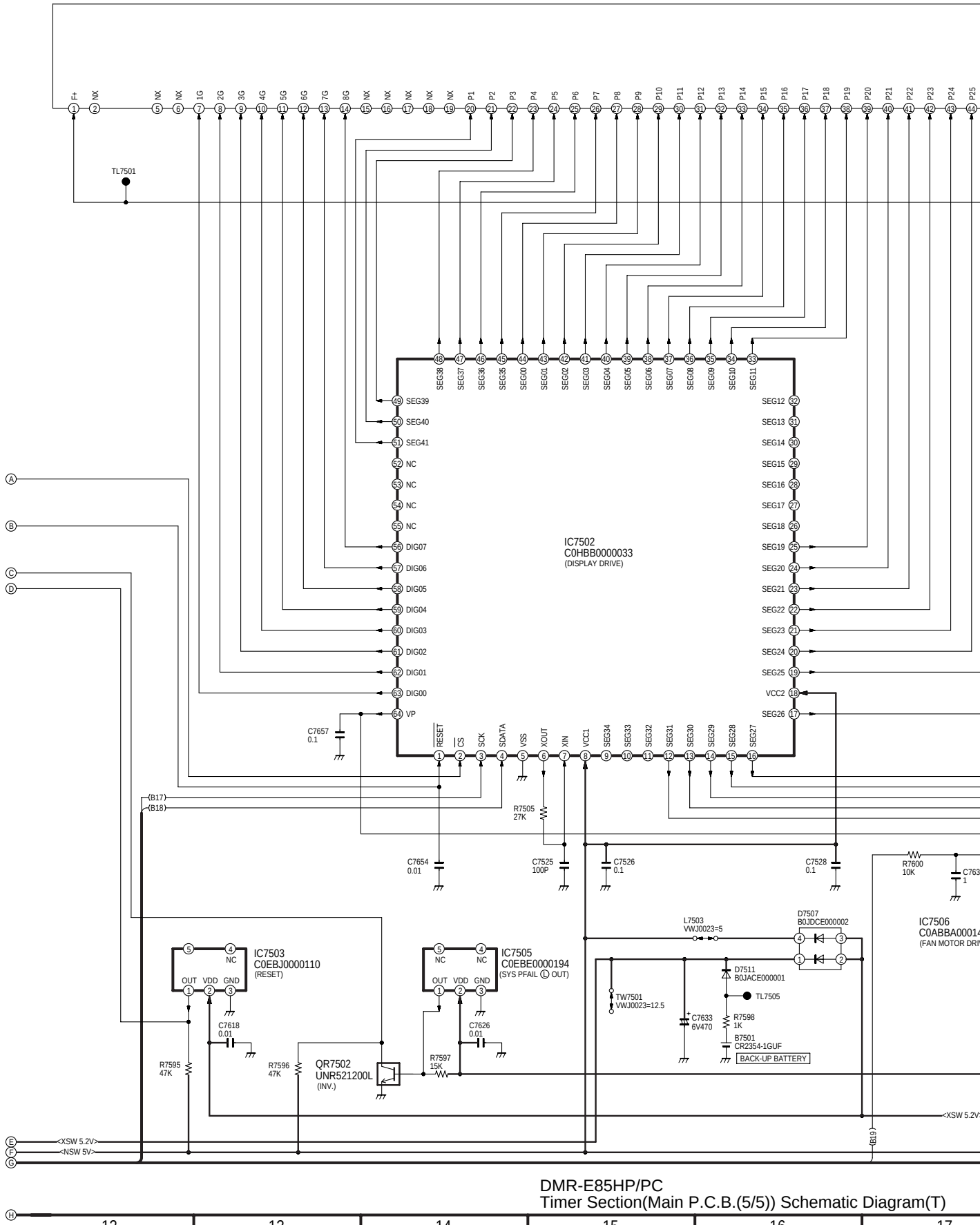
19.7. Timer Section (Main P.C.B. (5/5)) Schematic Diagram (T)



P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)



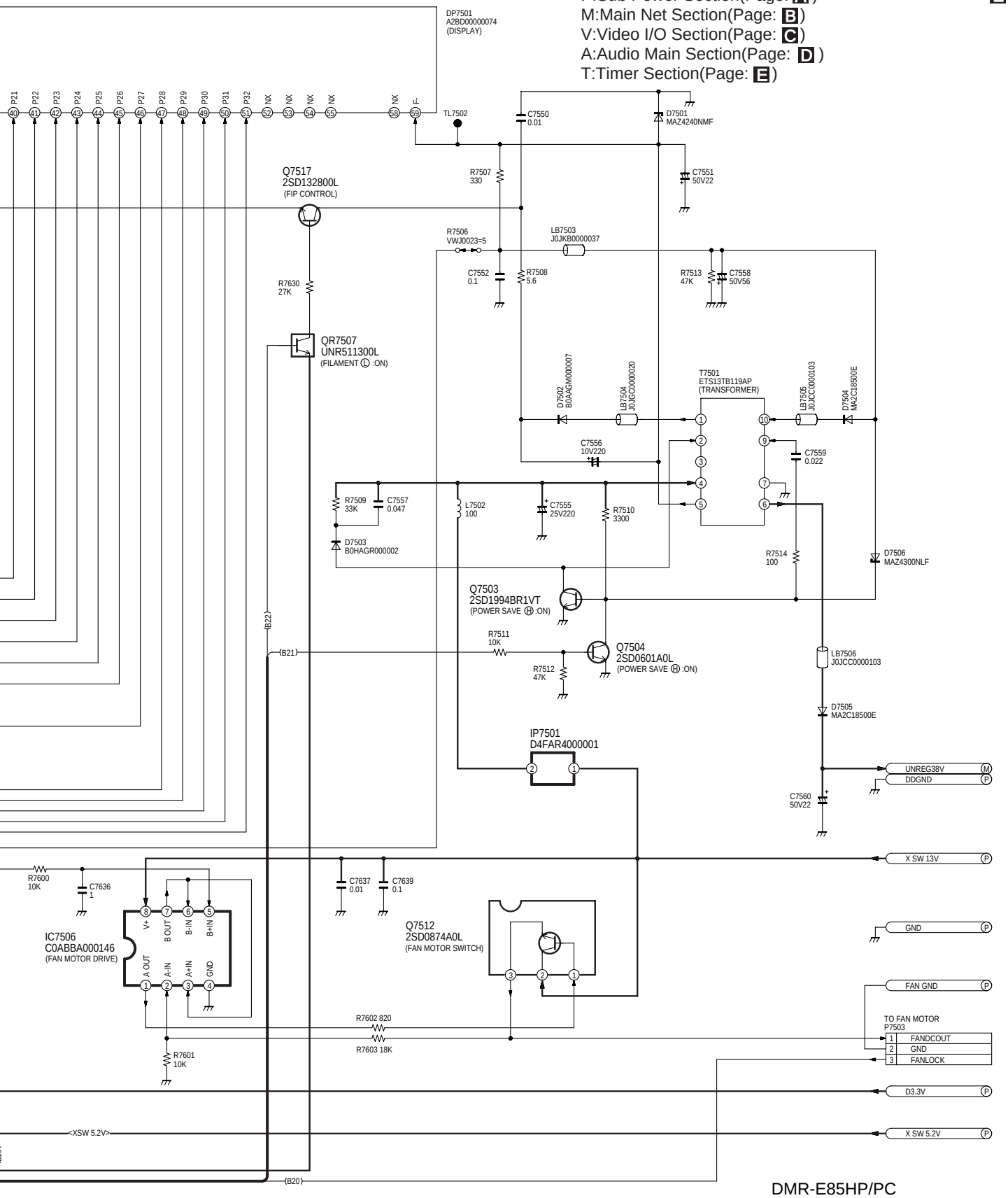
DMR-E85HP/PC
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)



DMR-E85HP/PC
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

E



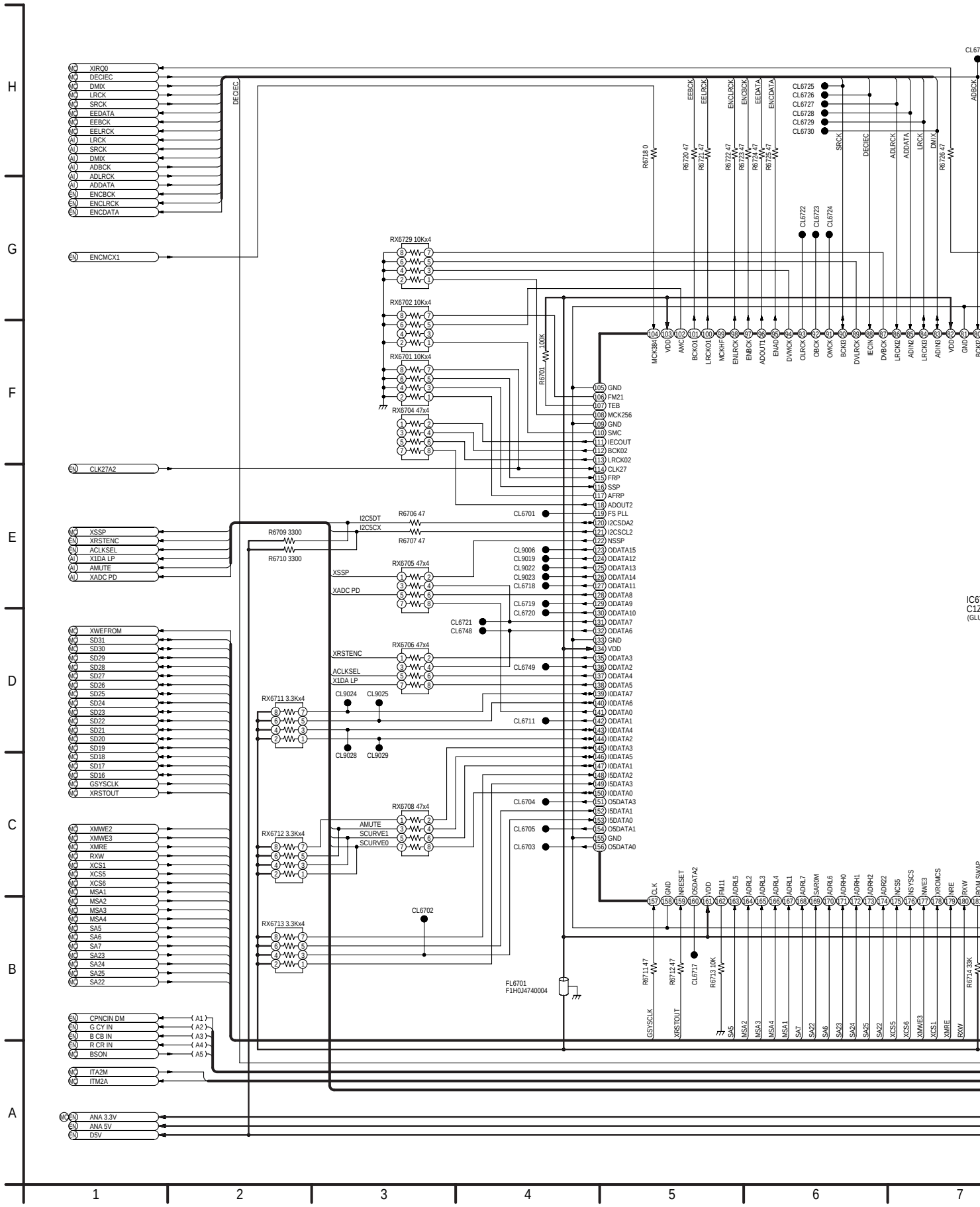
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

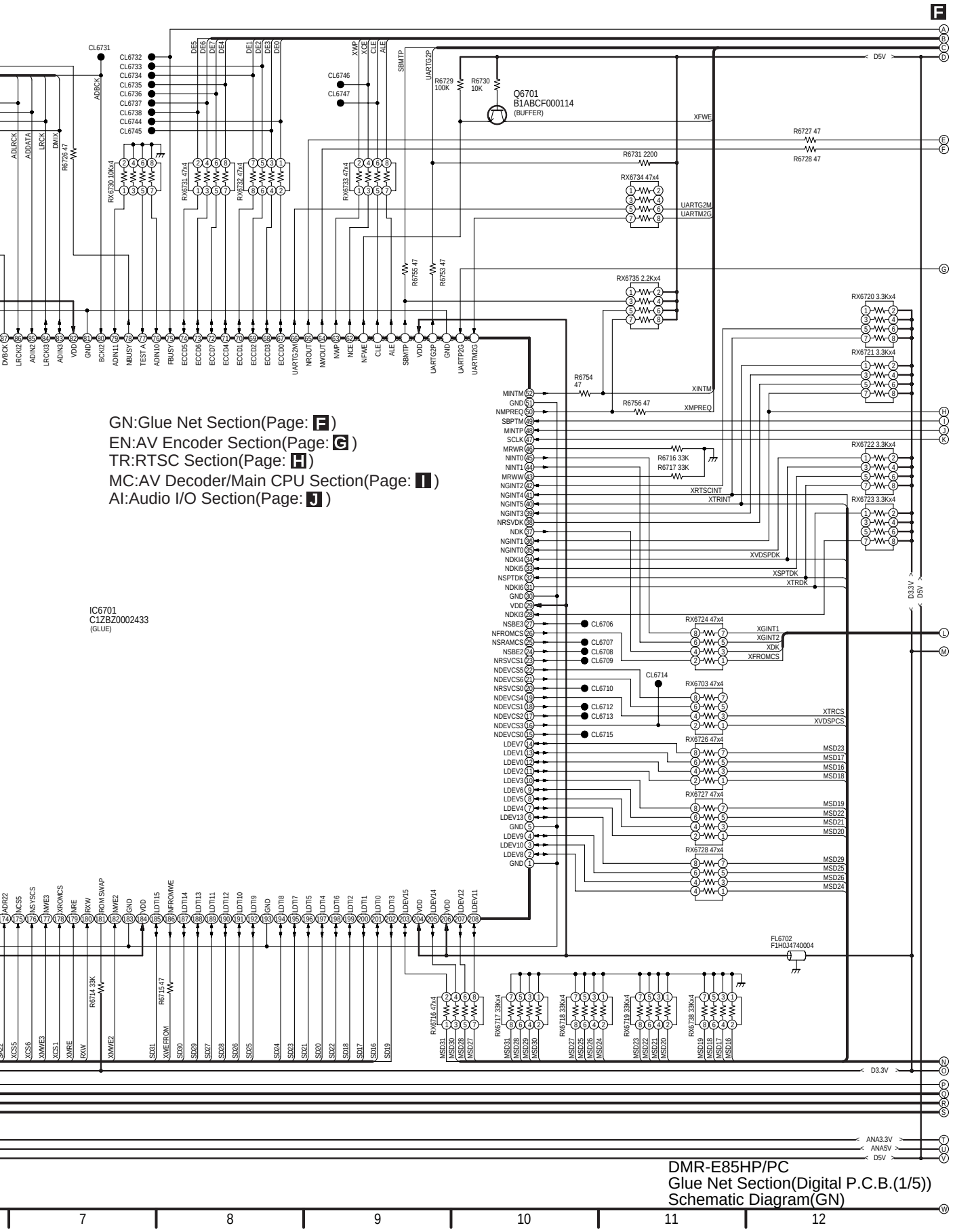
DMR-E85HP/PC
Timer Section(Main P.C.B.(5/5))
Schematic Diagram(T)

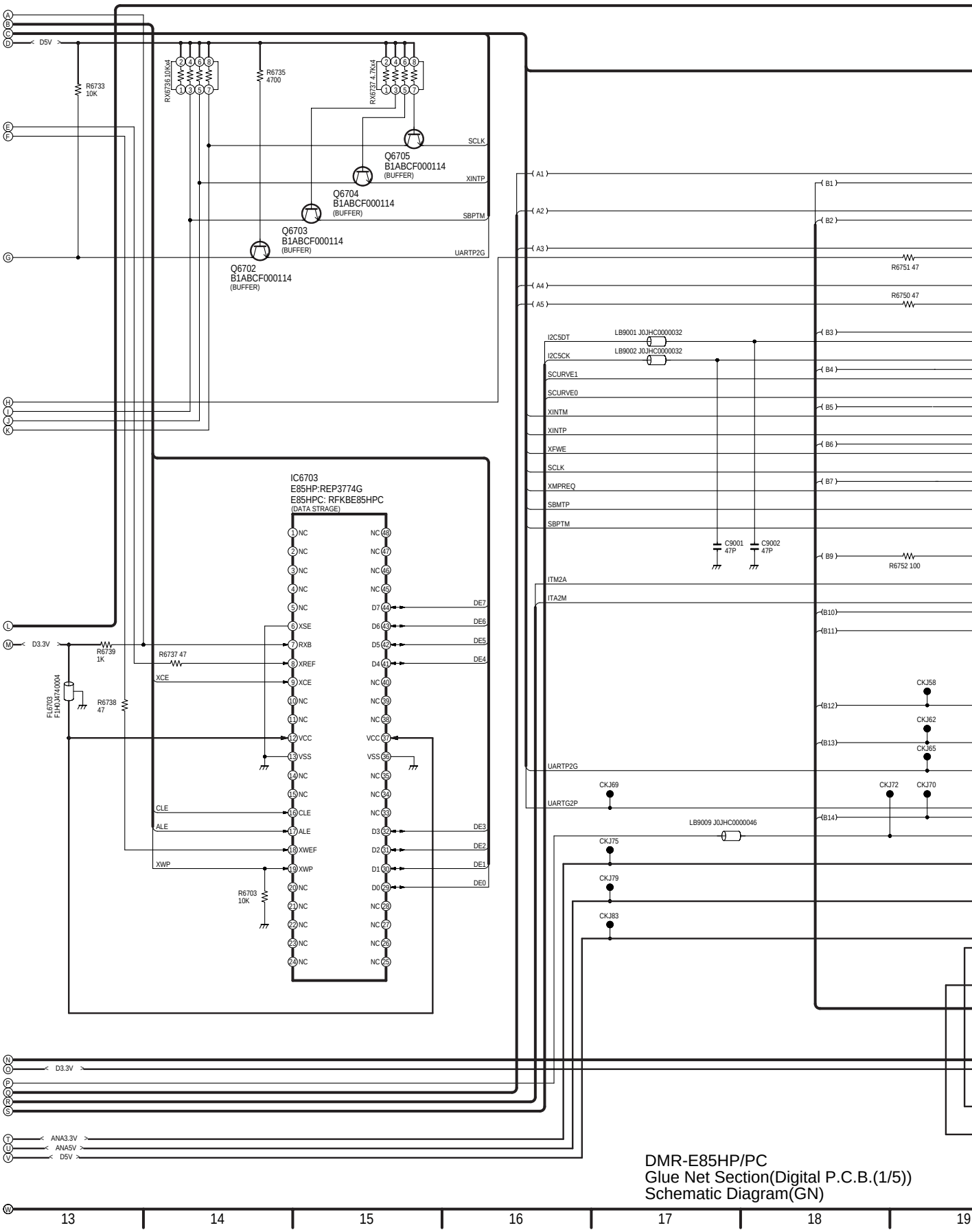
iagram(T)

17 | 18 | 19 | 20 | 21 | 22

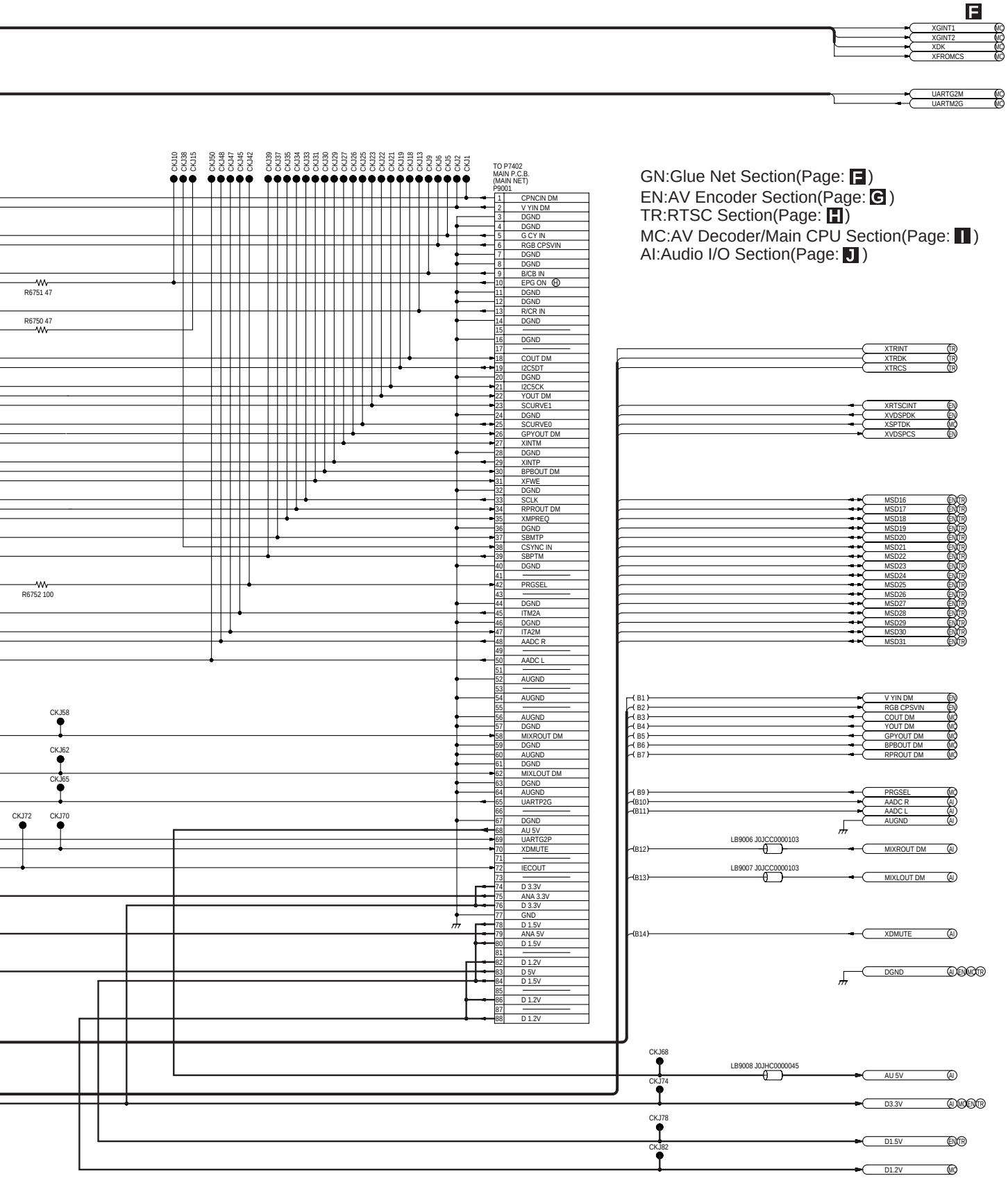
19.8. Glue Net Section (Digital P.C.B. (1/5)) Schematic Diagram (GN)




F
CL6731
CL6732
CL6733
CL6734
CL6735
CL6736
CL6737
CL6738
CL6744
CL6745
ADBCK
ADLRCK
ADDATA
LRCK
DMIX
R6726 47
RX6730 10Kx4
RX6731 47x4
RX6732 47x4
RX6733 47x4
DE5
DE6
DE7
DE4
DE1
DE2
DE3
DE0
XWP
XCE
CLE
ALE
SBMTP
CL6746
CL6747
UARTG2P
R6729 100K
R6730 10K
Q6701
B1ABCF000114
(BUFFER)
XFWE
D5V
R6727 47
R6728 47
R6731 2200
RX6734 47x4
UARTG2M
UARTM2G
R6755 47
R6753 47
RX6735 2.2Kx4
RX6720 3.3Kx4
RX6721 3.3Kx4
R6754 47
XINTM
R6756 47
XMPREQ
R6716 33K
R6717 33K
XRTSCINT
XTRINT
RX6722 3.3Kx4
RX6723 3.3Kx4
XVDSPDK
XSPTDK
XTRDK
D3.3V
D5V
GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
IC6701
C1ZBZ0002433
(GLUE)
CL6706
CL6707
CL6708
CL6709
CL6710
CL6712
CL6713
CL6715
CL6714
RX6724 47x4
XGINT1
XGINT2
XDK
XFROMCS
RX6703 47x4
XTRCS
XVDSPCS
RX6726 47x4
MSD23
MSD17
MSD16
MSD18
RX6727 47x4
MSD19
MSD22
MSD21
MSD20
RX6728 47x4
MSD29
MSD25
MSD26
MSD24
FL6702
F1H0J4740004
R6714 33K
R6715 47
RX6716 47x4
RX6717 33Kx4
RX6718 33Kx4
RX6719 33Kx4
RX6738 33Kx4
D3.3V
ANA3.3V
ANA5V
D5V
DMR-E85HP/PC
Glue Net Section(Digital P.C.B.(1/5))
Schematic Diagram(GN)
7
8
9
10
11
12



DMR-E85HP/PC
Glue Net Section(Digital P.C.B.(1/5))
Schematic Diagram(GN)



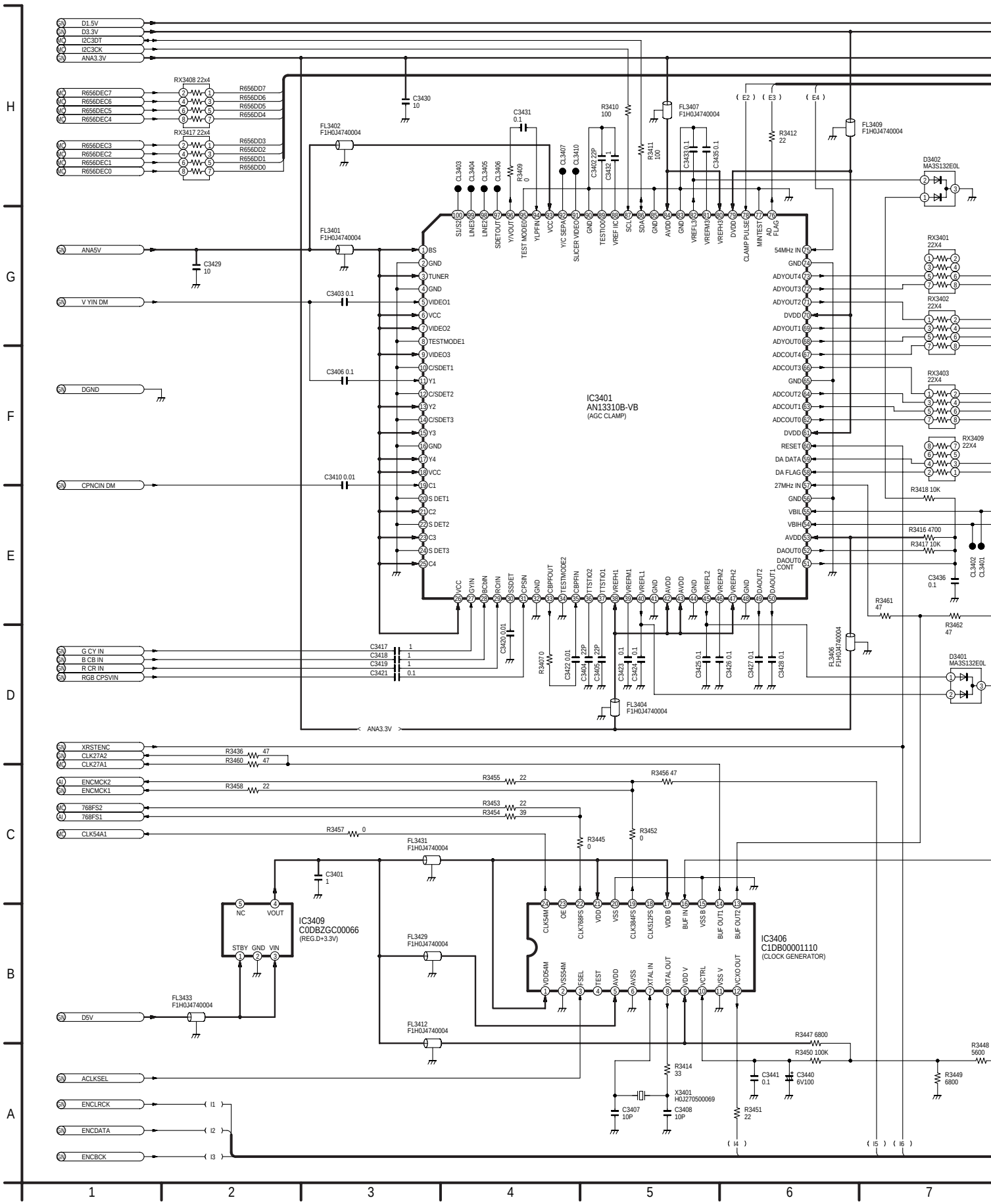
.(1/5))

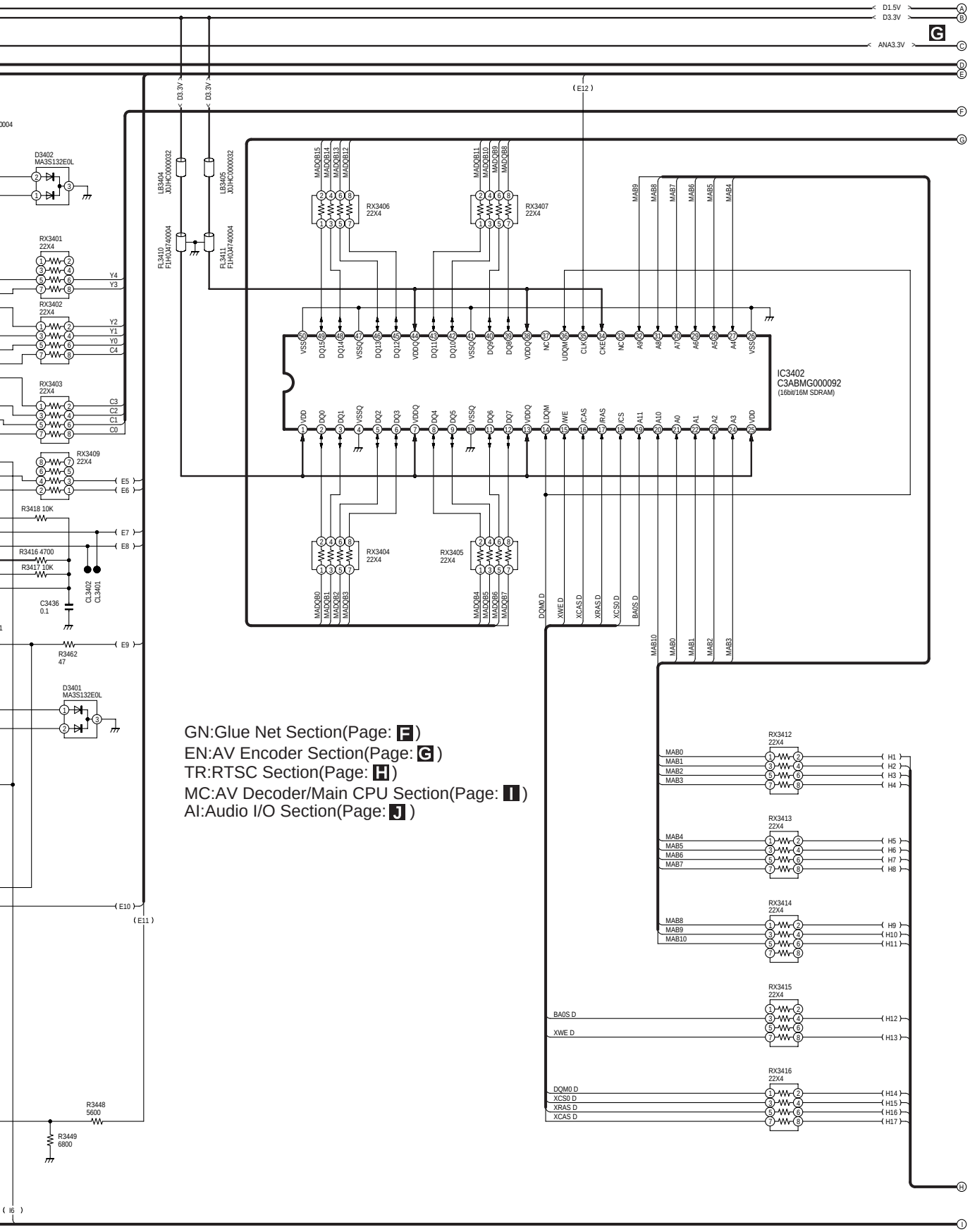
DMR-E85HP/PC
Glue Net Section(Digital P.C.B.(1/5))
Schematic Diagram(GN)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

19 20 21 22 23 24 25

19.9. AV Encoder Section (Digital P.C.B. (2/5)) Schematic Diagram (EN)

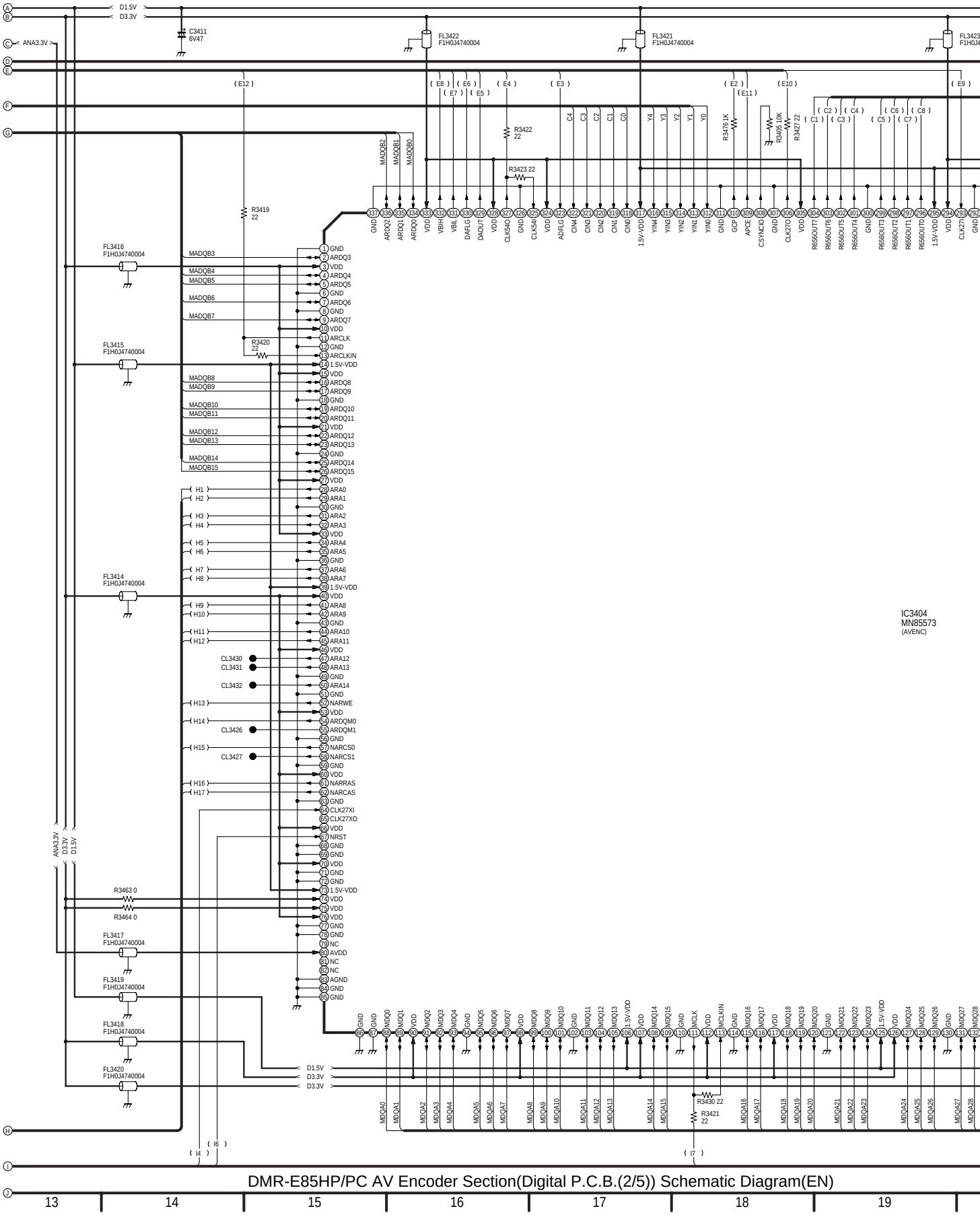




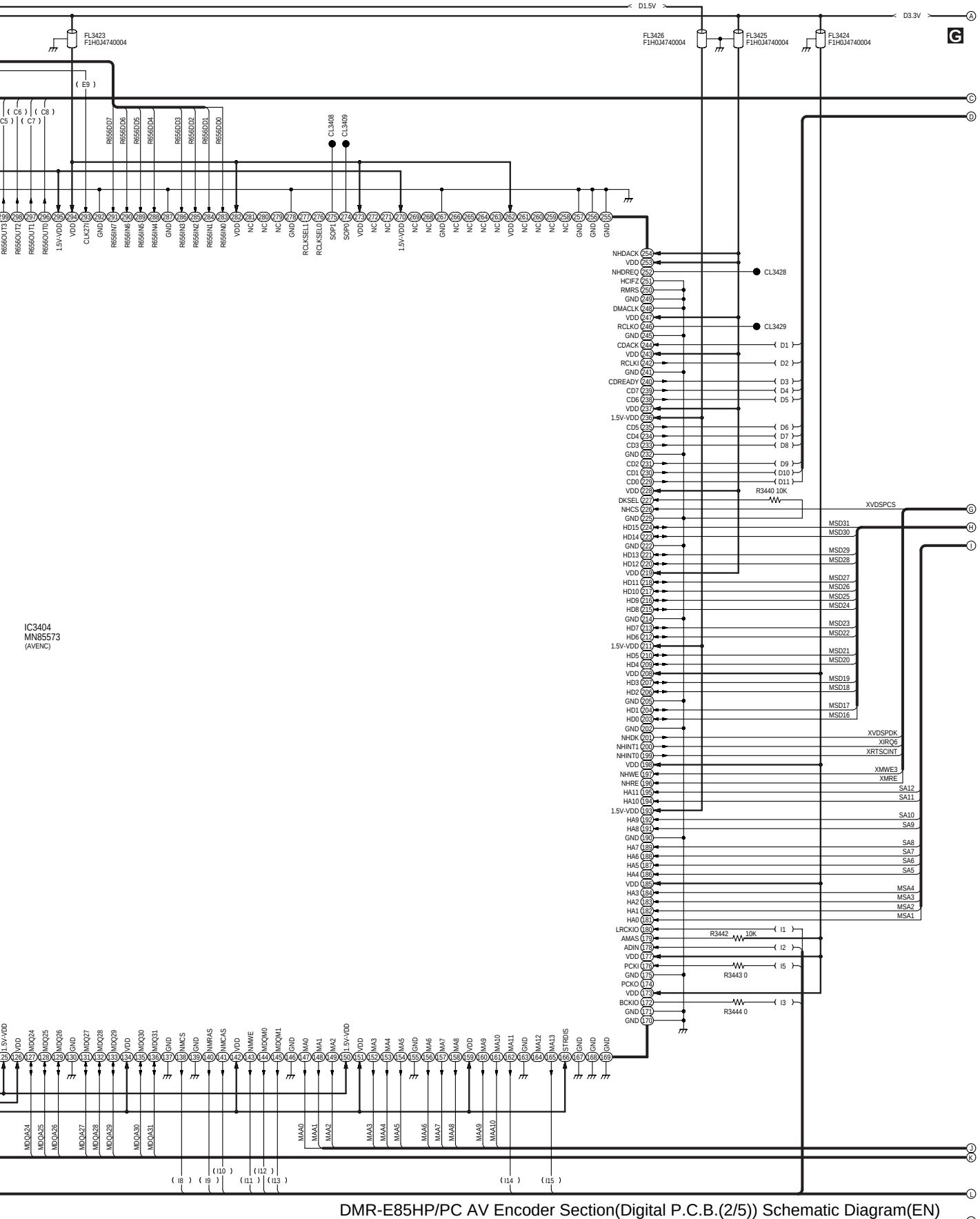
GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

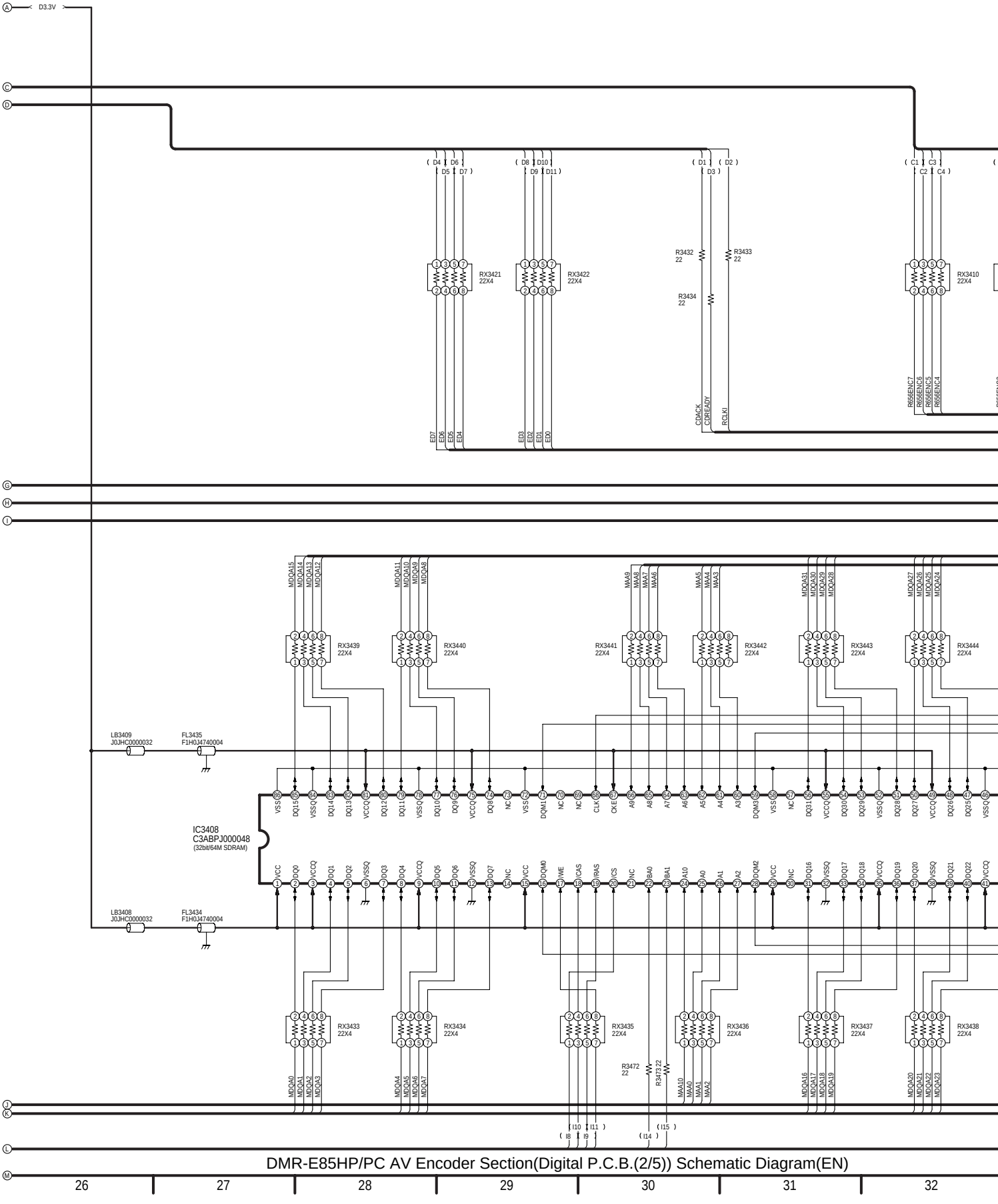
DMR-E85HP/PC AV Encoder Section(Digital P.C.B.(2/5)) Schematic Diagram(EN)

7 | 8 | 9 | 10 | 11 | 12 | 13



DMR-E85HP/PC AV Encoder Section(Digital P.C.B.(2/5)) Schematic Diagram(EN)

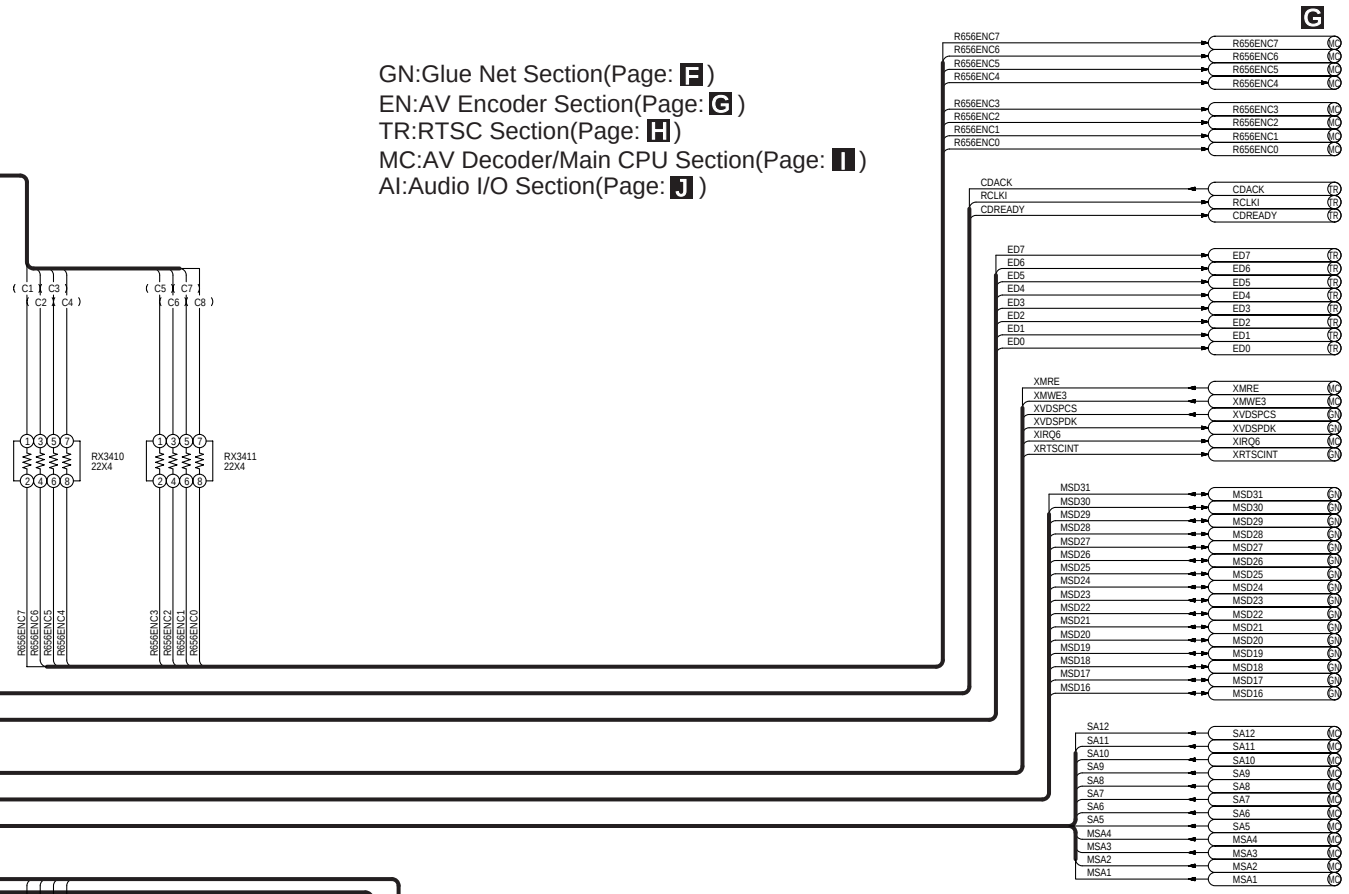

D1.5V
D3.3V
FL3423 F1H0J4740004
FL3426 F1H0J4740004
FL3425 F1H0J4740004
FL3424 F1H0J4740004
IC3404
MN85573
(AVENC)
CL3428
CL3429
R3440 10K
R3442 10K
R3443 0
R3444 0
XVDSPCS
XVDSPDK
XIRQ6
XRTSCINT
XMWE3
XMRE
DMR-E85HP/PC AV Encoder Section(Digital P.C.B.(2/5)) Schematic Diagram(EN)

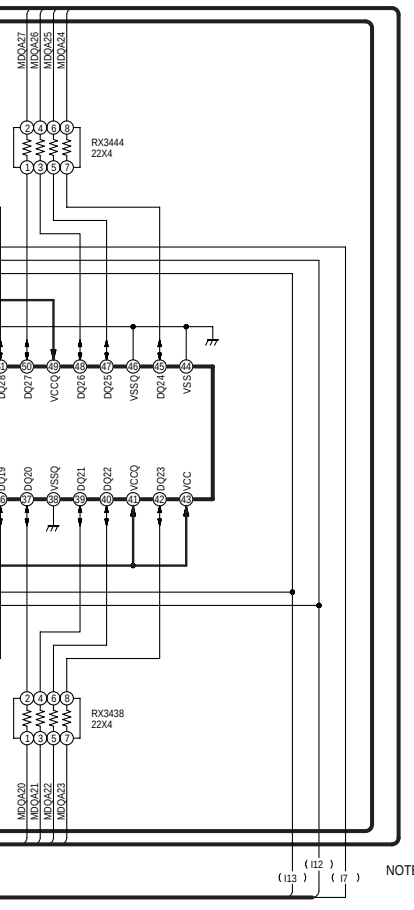


DMR-E85HP/PC AV Encoder Section(Digital P.C.B.(2/5)) Schematic Diagram(EN)

26 | 27 | 28 | 29 | 30 | 31 | 32

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)



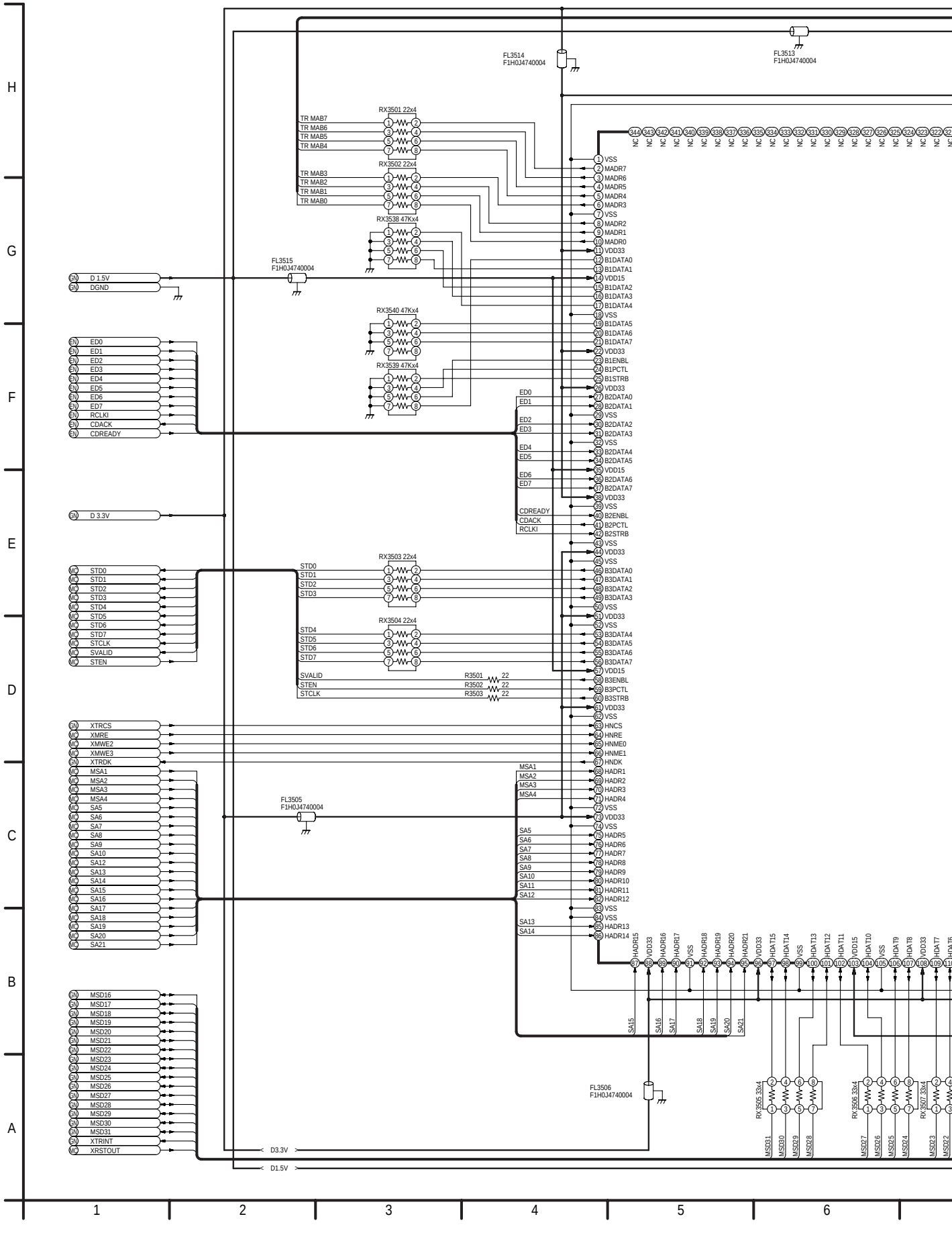


NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

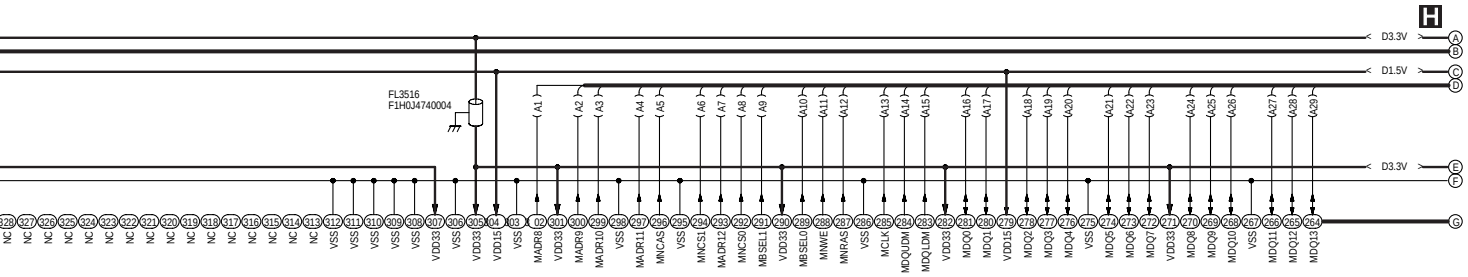
DMR-E85HP/PC
AV Encoder Section(Digital P.C.B.(2/5))
Schematic Diagram(EN)

32 | 33 | 34 | 35 | 36 | 37

19.10. Real Time Stream Control (RTSC) Section (Digital P.C.B. (3/5)) Schematic D

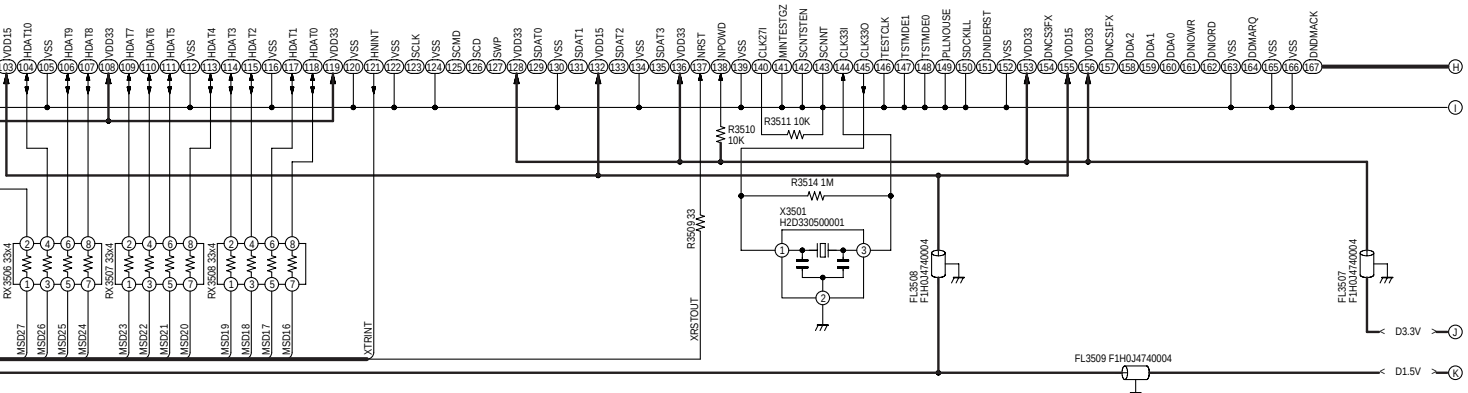


ematic Diagram (TR)



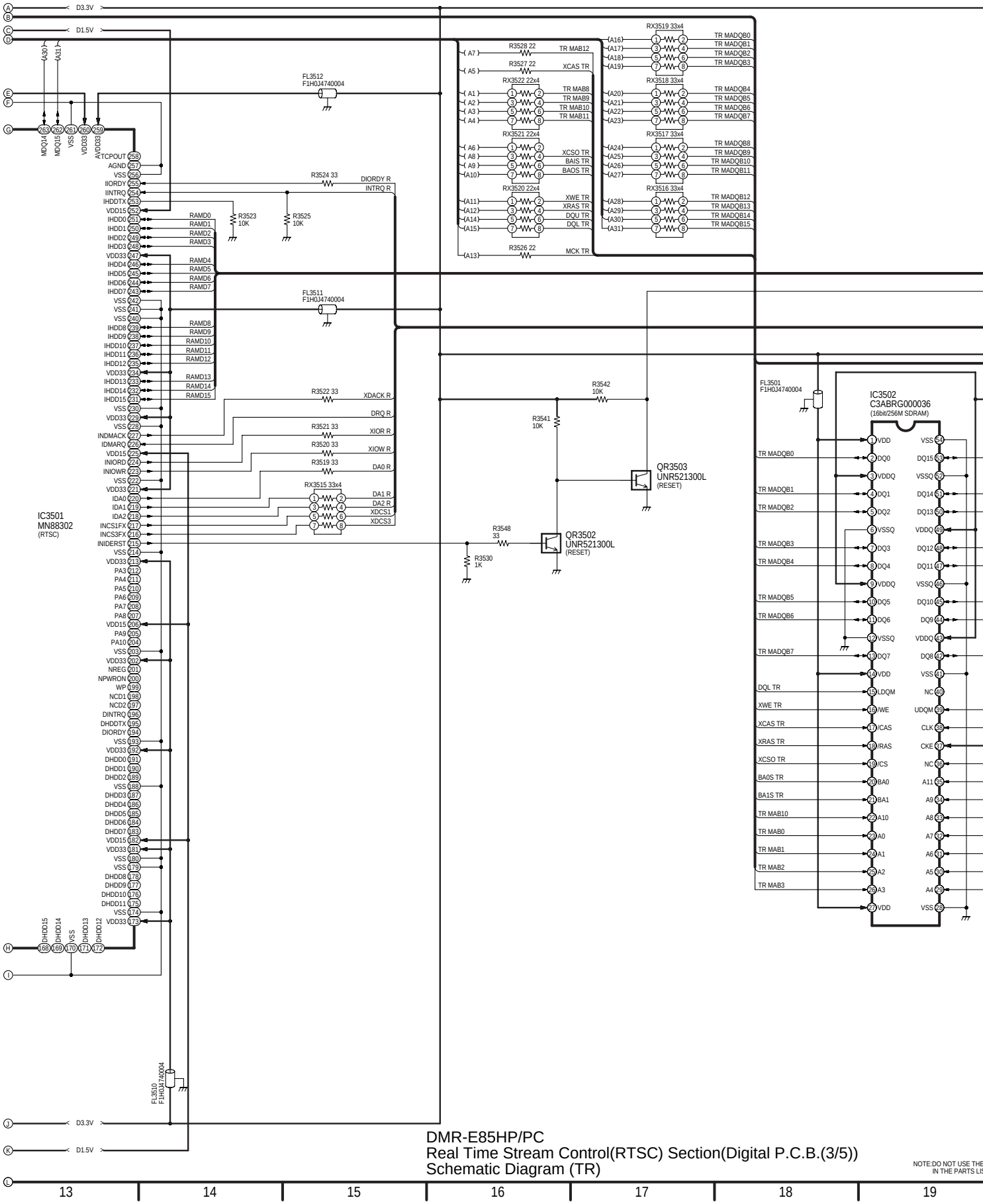
GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

IC3501
MN88302
(RTSC)



DMR-E85HP/PC Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/5)) Schematic Diagram(TR)

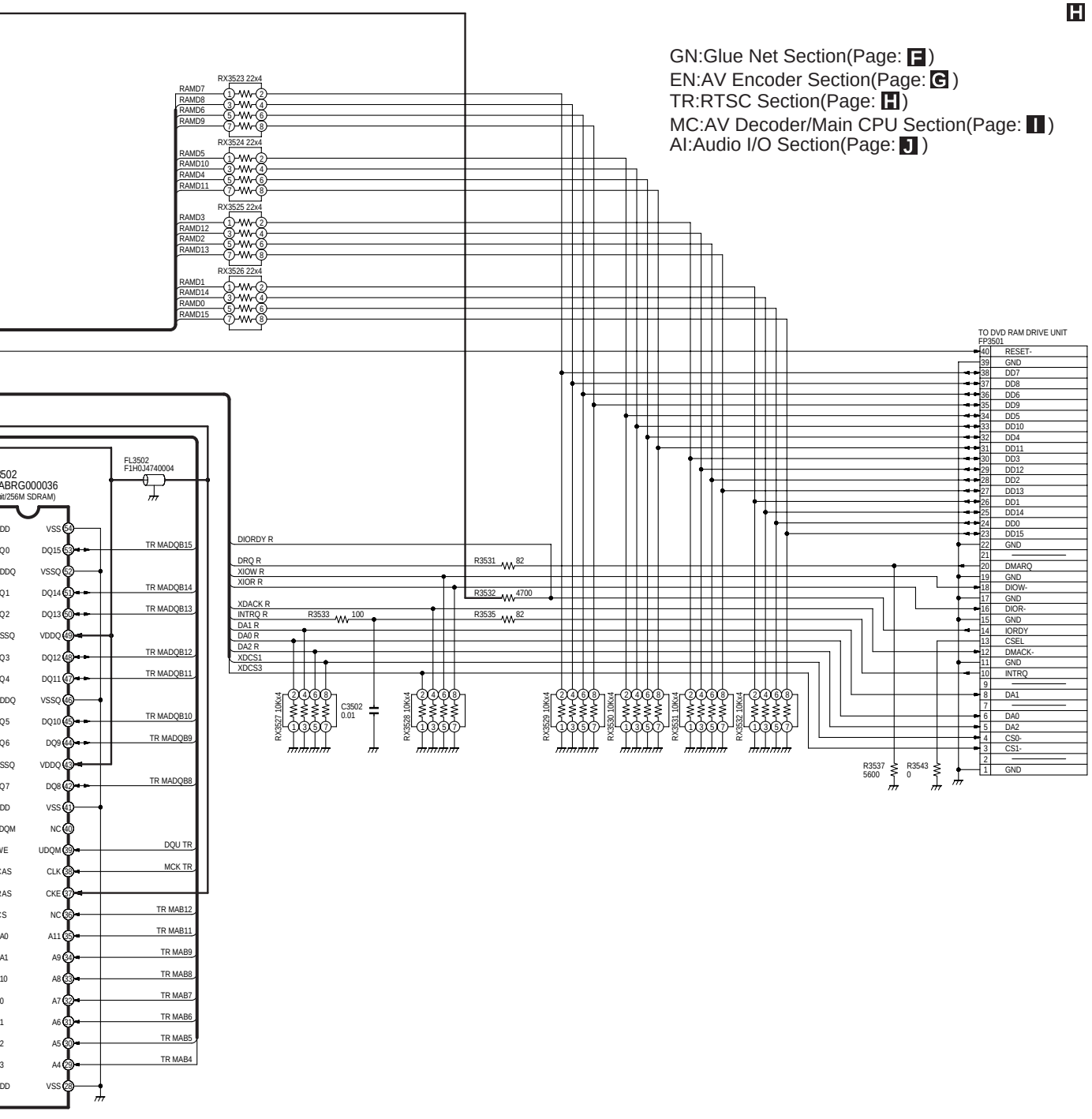
7 8 9 10 11 12



DMR-E85HP/PC
Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/5))
Schematic Diagram (TR)

NOTE:DO NOT USE THE
IN THE PARTS LIS

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

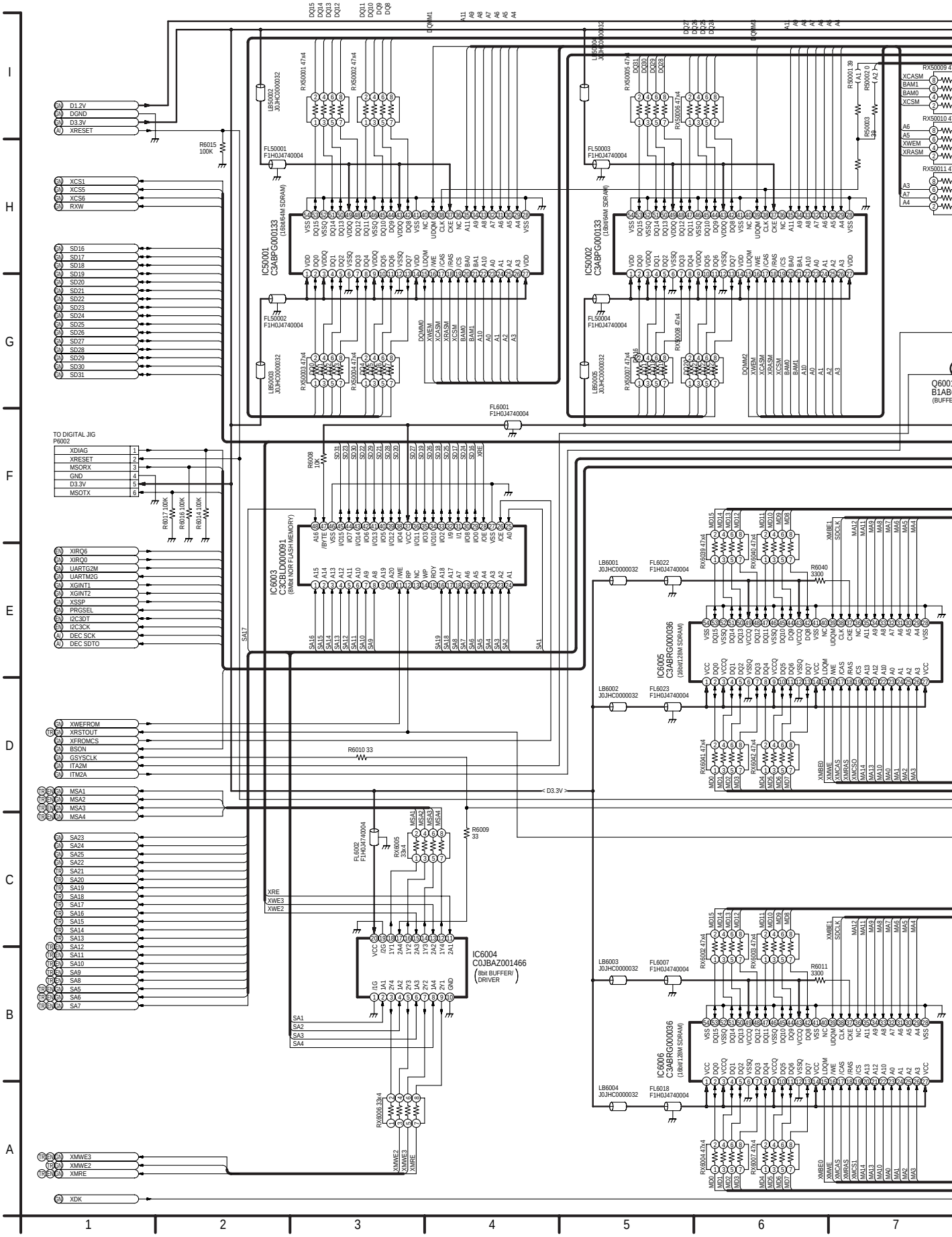


DMR-E85HP/PC
Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/5))
Schematic Diagram (TR)

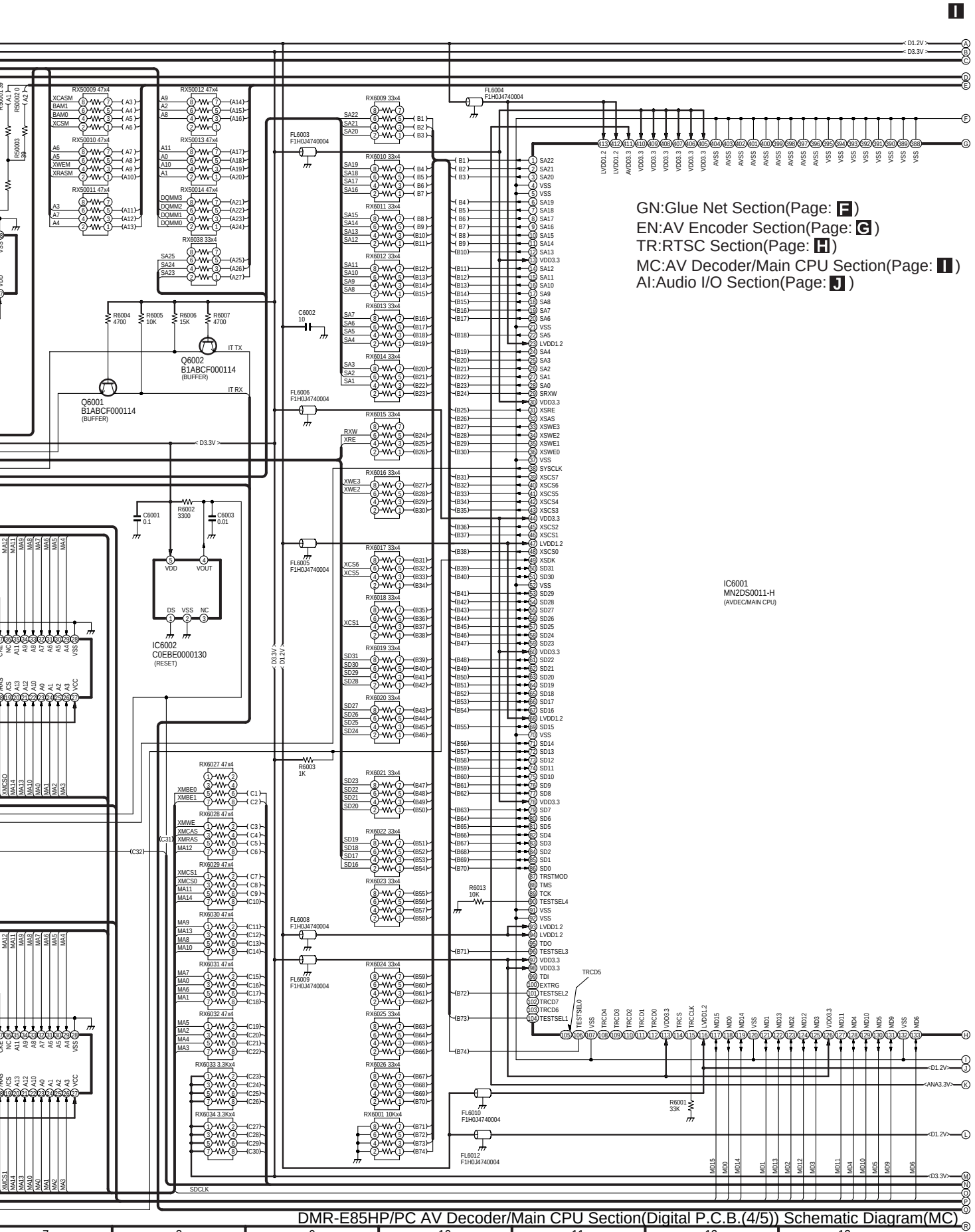
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

19	20	21	22	23	24	25

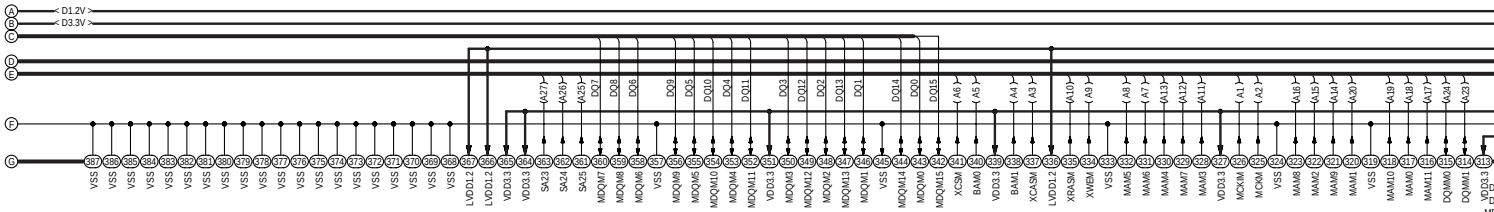
19.11. AV Decoder/Main CPU Section (Digital P.C.B. (4/5)) Schematic Diagram (MC



gram (MC)

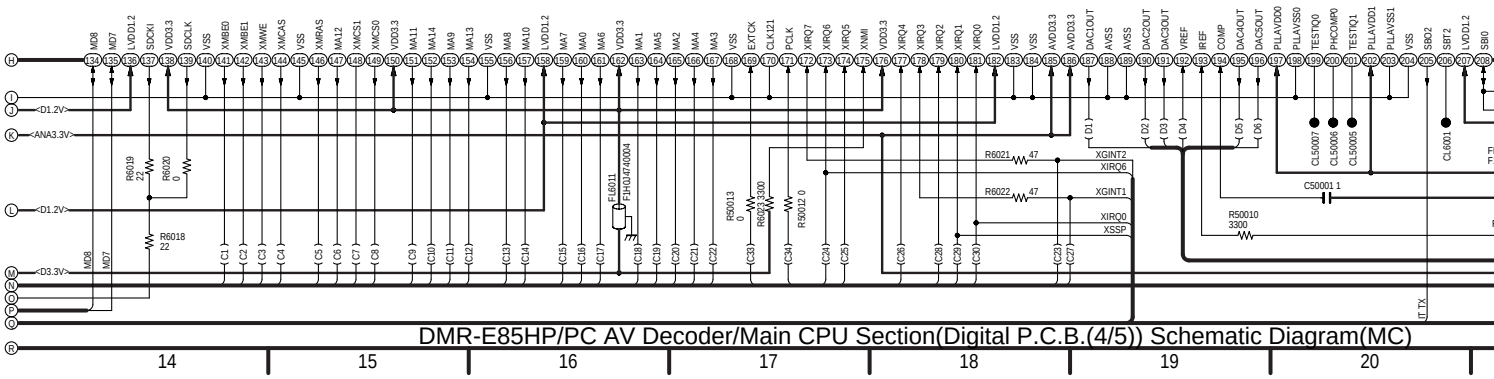


DMR-E85HP/PC AV Decoder/Main CPU Section(Digital P.C.B.(4/5)) Schematic Diagram(MC)

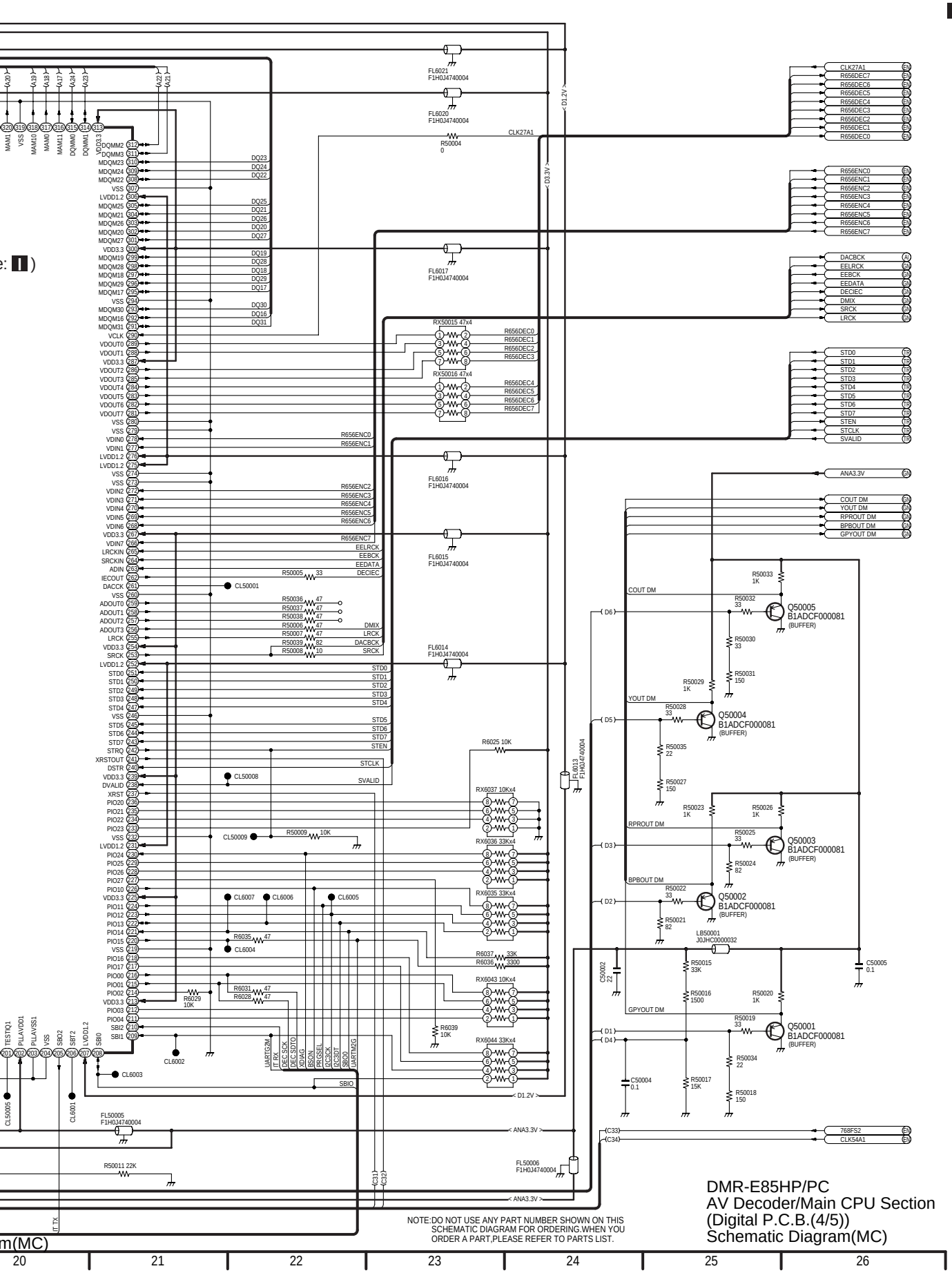


GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

IC6001
MN2DS0011-H
(AVDEC/MAIN CPU)



DMR-E85HP/PC AV Decoder/Main CPU Section(Digital P.C.B.(4/5)) Schematic Diagram(MC)



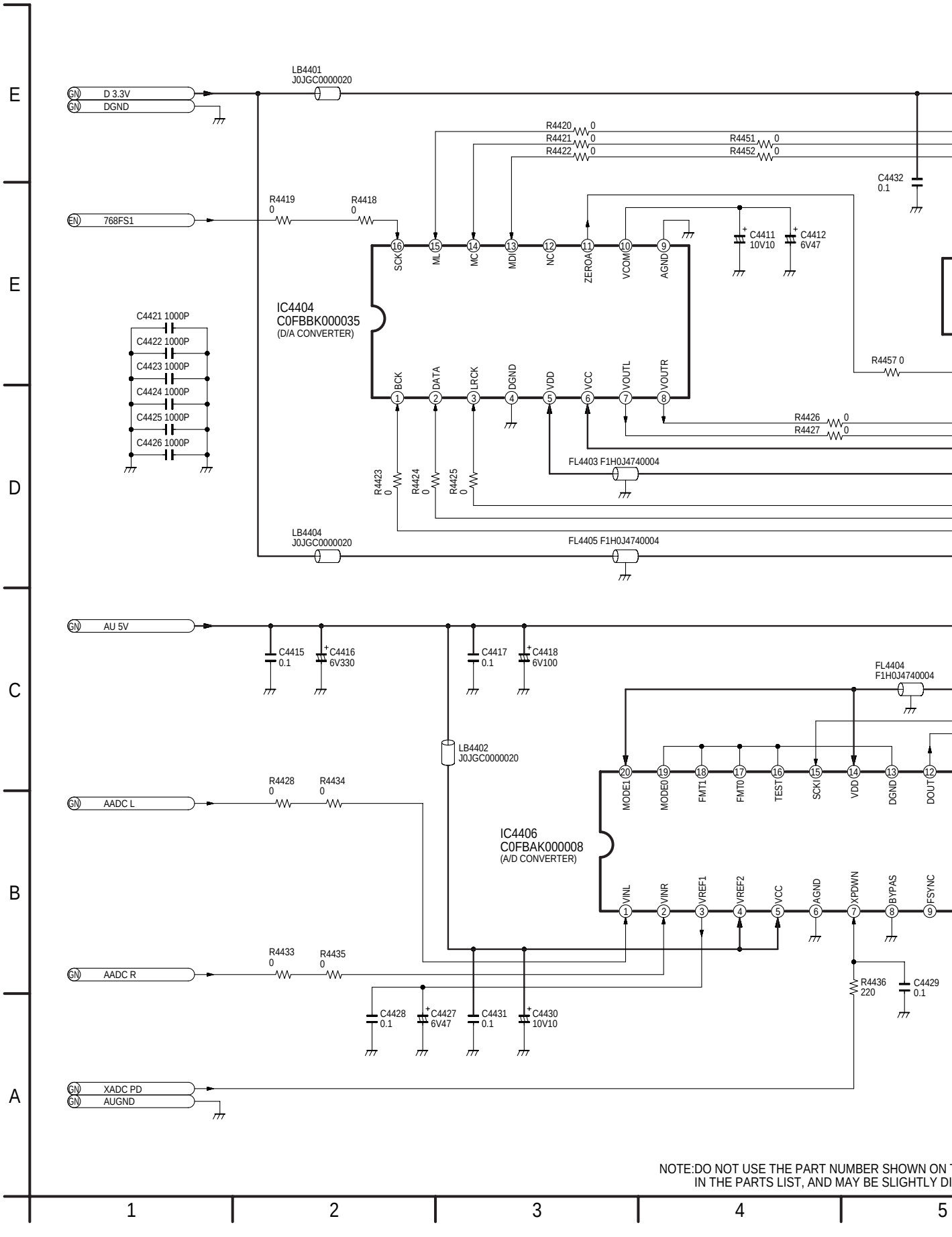
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

DMR-E85HP/PC
AV Decoder/Main CPU Section
(Digital P.C.B.(4/5))
Schematic Diagram(MC)

m(MC)

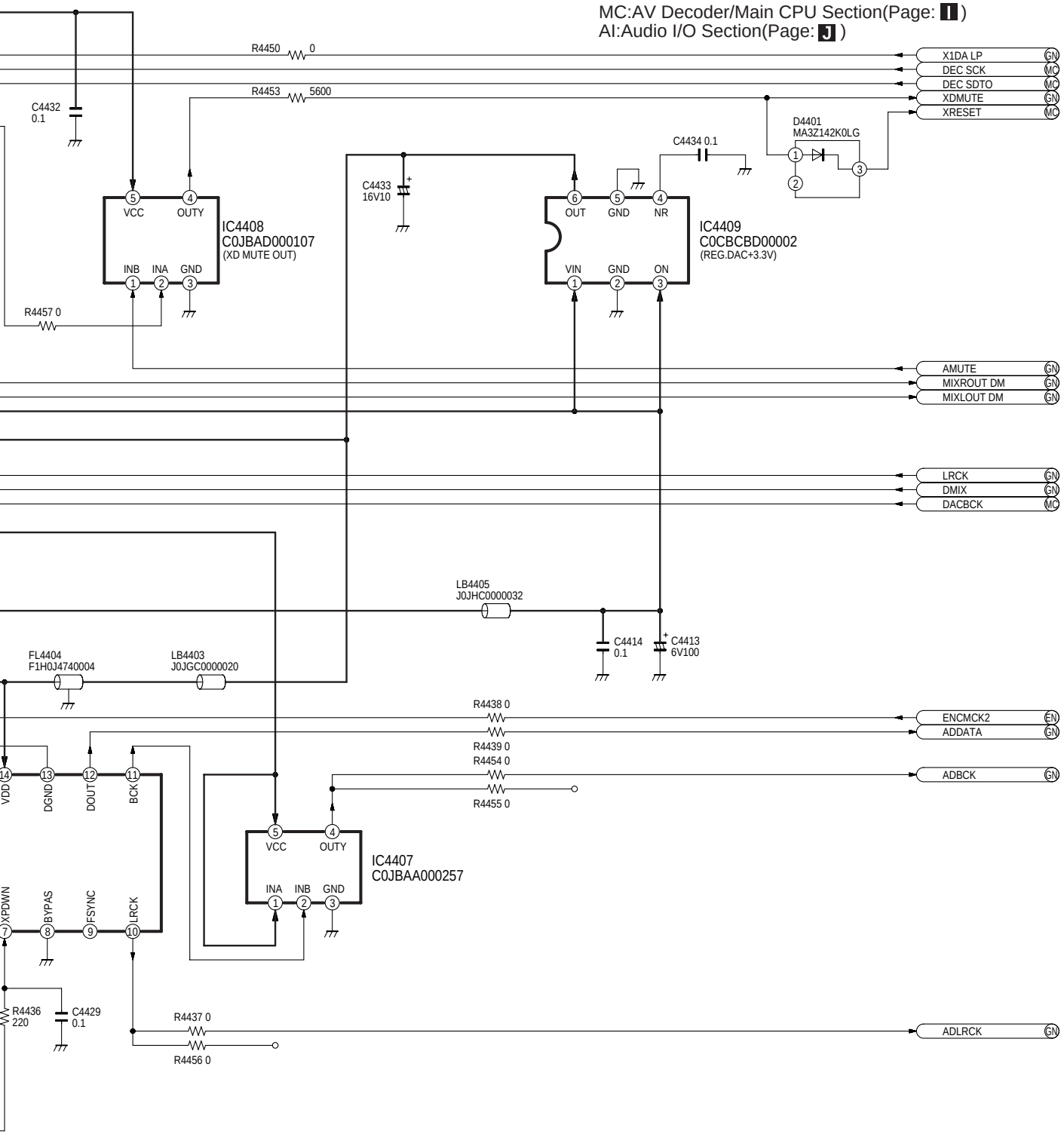
20 21 22 23 24 25 26

19.12. Audio I/O Section (Digital P.C.B. (5/5)) Schematic Diagram (AI)



GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

J

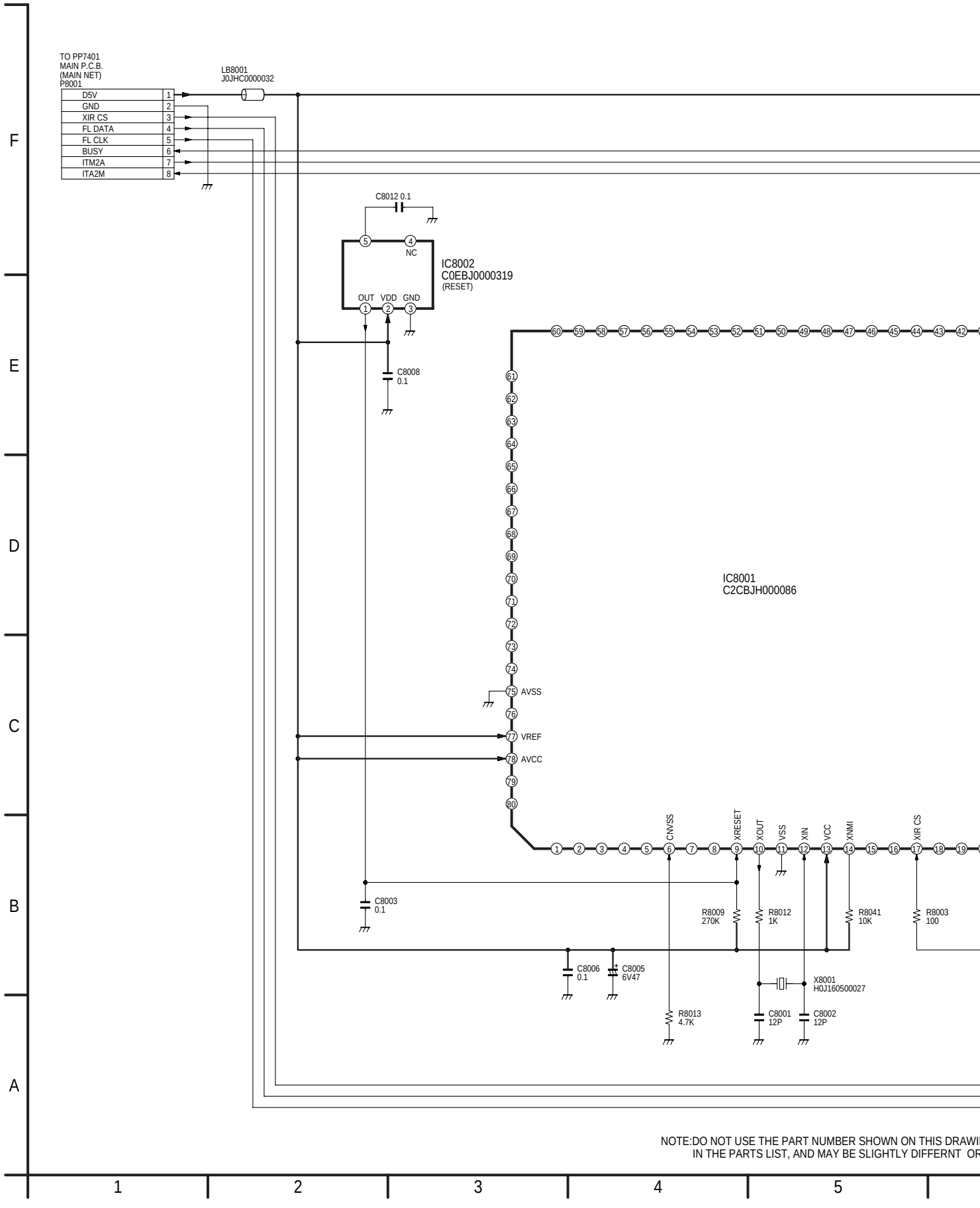


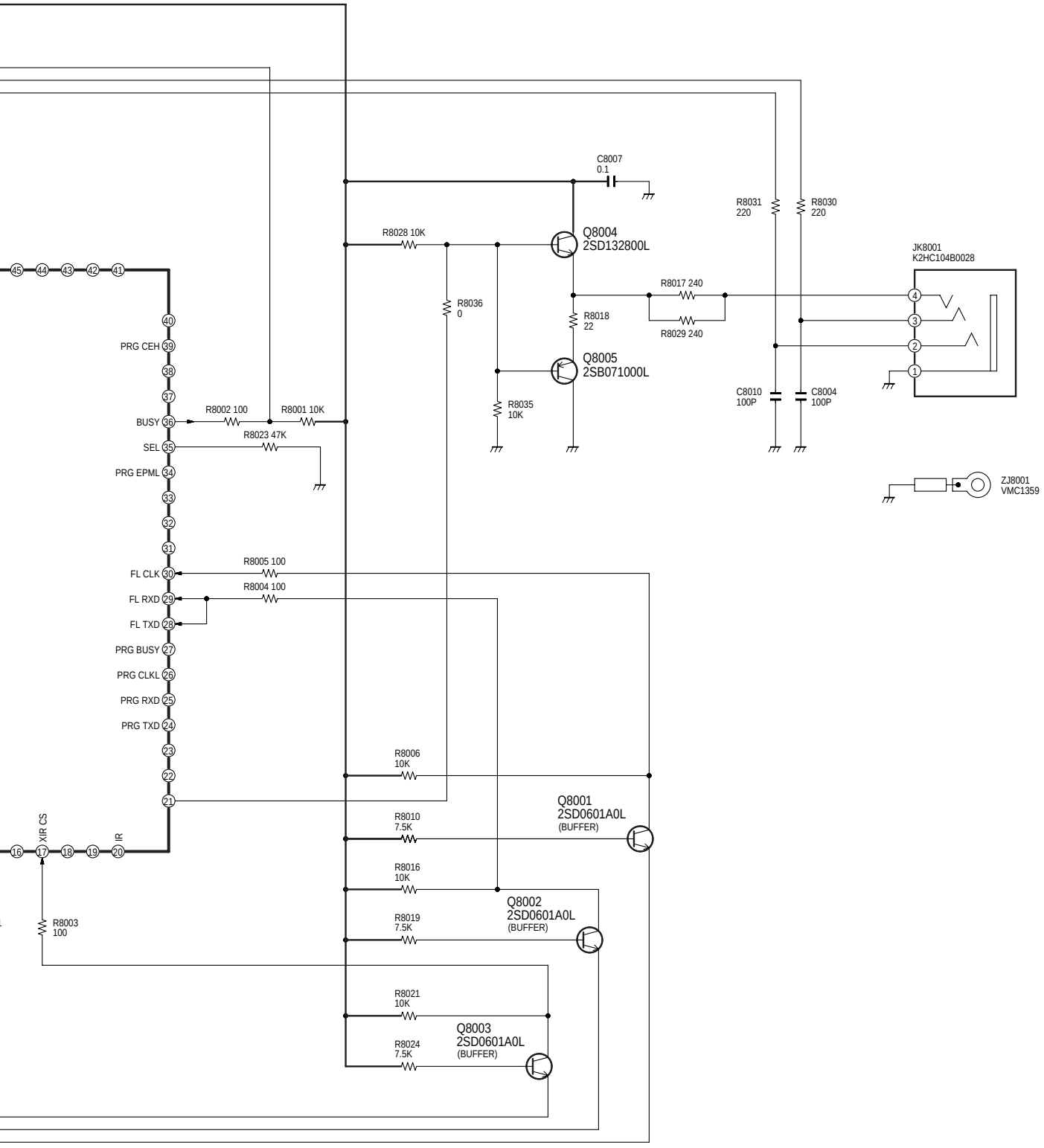
MBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
Y BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Audio I/O Section(Digital P.C.B.(5/5))
Schematic Diagram(AI)

5	6	7	8	9

19.13. IR Schematic Diagram



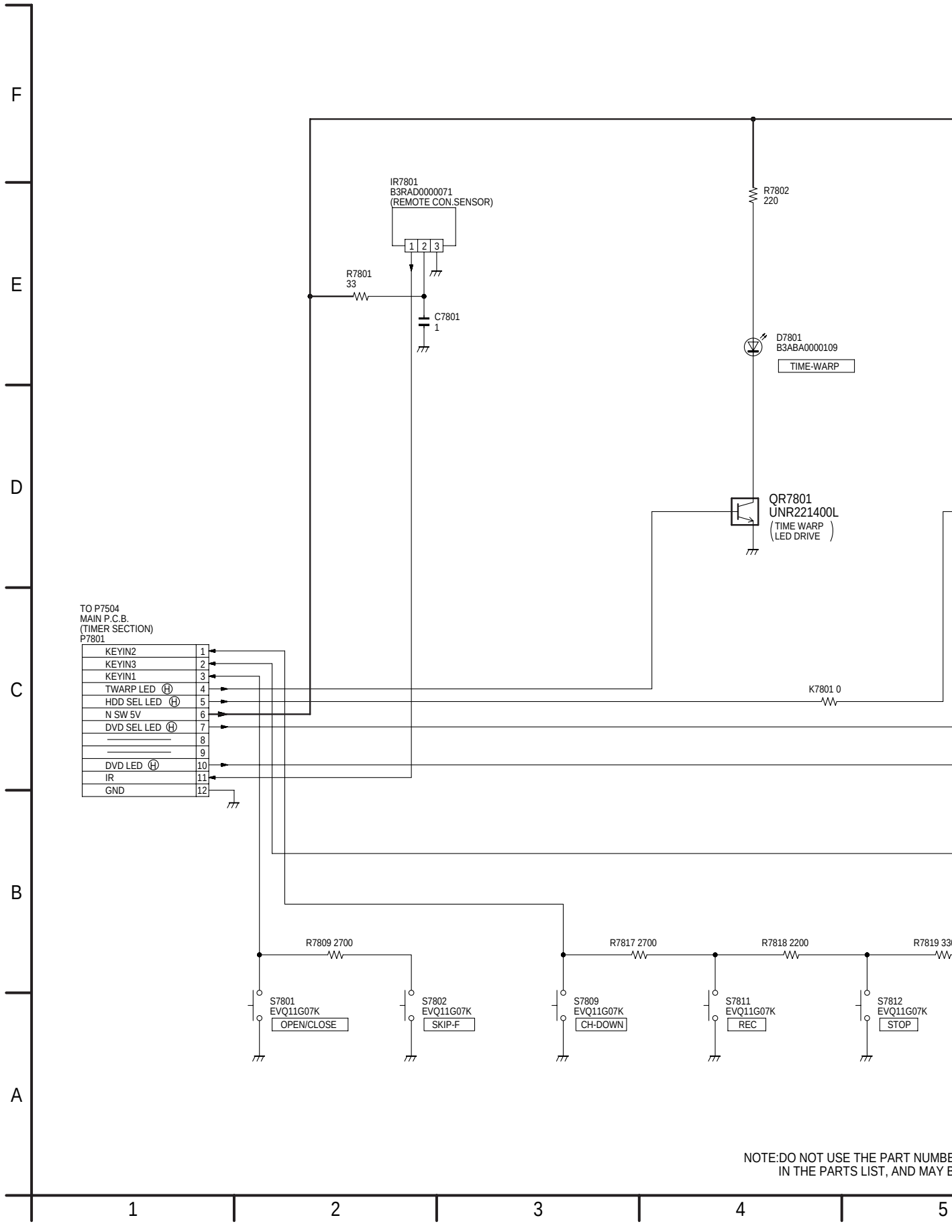


OWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
GHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

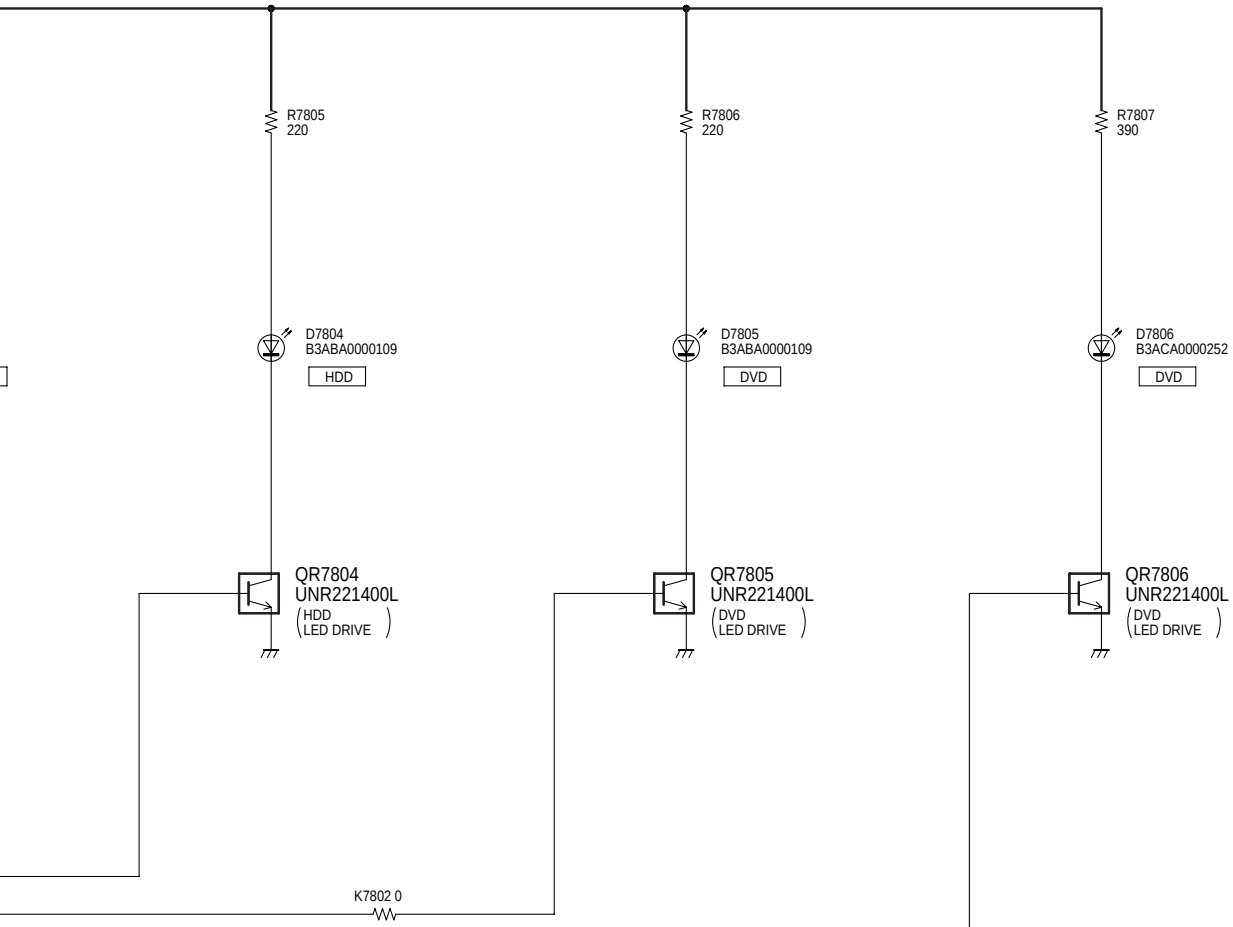
DMR-E85HP/PC
IR Schematic Diagram

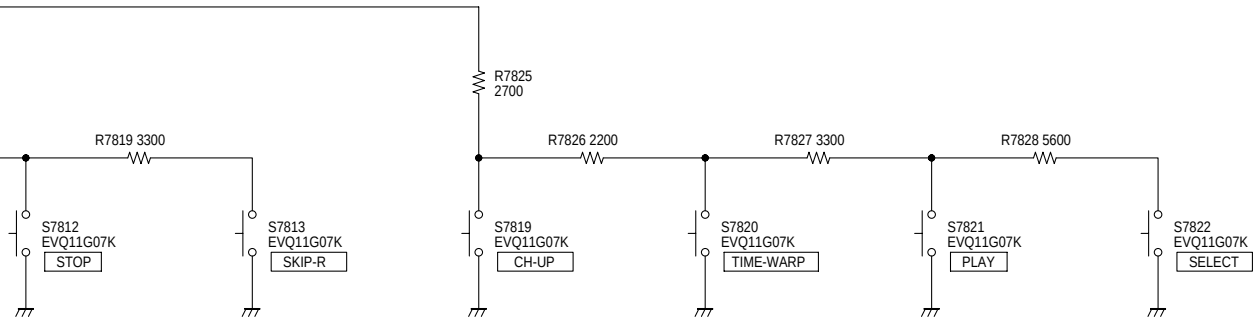
6	7	8	9	10

19.14. Front (R) Schematic Diagram



NOTE:DO NOT USE THE PART NUMBE
IN THE PARTS LIST, AND MAY E





THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
S LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Front(R)
Schematic Diagram

5	6	7	8	9

IC Pin Terminal Chart (TC 1 - TC 8)

TC	IC3404 / AVENC		SIGNAL NAME	IC3402 / SDRAM	
	Port Name	Pin No		Pin No	Port Name
1	ARDQ0	334	MADQB0	2	DQ0
	ARDQ1	335	MADQB1	3	DQ1
	ARDQ2	336	MADQB2	5	DQ2
	ARDQ3	2	MADQB3	6	DQ3
	ARDQ4	4	MADQB4	8	DQ4
	ARDQ5	5	MADQB5	9	DQ5
	ARDQ6	7	MADQB6	11	DQ6
	ARDQ7	9	MADQB7	12	DQ7
	ARDQ8	16	MADQB8	39	DQ8
	ARDQ9	17	MADQB9	40	DQ9
	ARDQ10	19	MADQB10	42	DQ10
	ARDQ11	20	MADQB11	43	DQ11
	ARDQ12	22	MADQB12	45	DQ12
	ARDQ13	23	MADQB13	46	DQ13
	ARDQ14	25	MADQB14	48	DQ14
	ARDQ15	26	MADQB15	49	DQ15
	ARA0	28	MAB0	21	A0
	ARA1	29	MAB1	22	A1
	ARA2	31	MAB2	23	A2
	ARA3	32	MAB3	24	A3
	ARA4	34	MAB4	27	A4
	ARA5	35	MAB5	28	A5
	ARA6	37	MAB6	29	A6
	ARA7	38	MAB7	30	A7
	ARA8	41	MAB8	31	A8
	ARA9	42	MAB9	32	A9
	ARA10	44	MAB10	20	A10
	ARA11	45	BAOS D	19	A11

TC	IC3404 / AV ENC		SIGNAL NAME	IC3408 / SDRAM	
	Port Name	Pin No		Pin No	Port Name
2	MDQ0	88	MDQA0	2	DQ0
	MDQ1	89	MDQA1	4	DQ1
	MDQ2	91	MDQA2	5	DQ2
	MDQ3	92	MDQA3	7	DQ3
	MDQ4	93	MDQA4	8	DQ4
	MDQ5	95	MDQA5	10	DQ5
	MDQ6	96	MDQA6	11	DQ6
	MDQ7	97	MDQA7	13	DQ7
	MDQ8	99	MDQA8	74	DQ8
	MDQ9	100	MDQA9	76	DQ9
	MDQ10	101	MDQA10	77	DQ10
	MDQ11	103	MDQA11	79	DQ11
	MDQ12	104	MDQA12	80	DQ12
	MDQ13	105	MDQA13	82	DQ13
	MDQ14	108	MDQA14	83	DQ14
	MDQ15	109	MDQA15	85	DQ15
	MDQ16	115	MDQA16	31	DQ16
	MDQ17	116	MDQA17	33	DQ17
	MDQ18	118	MDQA18	34	DQ18
	MDQ19	119	MDQA19	36	DQ19
	MDQ20	120	MDQA20	37	DQ20
	MDQ21	122	MDQA21	39	DQ21
	MDQ22	123	MDQA22	40	DQ22
	MDQ23	124	MDQA23	42	DQ23
	MDQ24	127	MDQA24	45	DQ24
	MDQ25	128	MDQA25	47	DQ25
	MDQ26	129	MDQA26	48	DQ26
	MDQ27	131	MDQA27	50	DQ27
	MDQ28	132	MDQA28	51	DQ28
	MDQ29	133	MDQA29	53	DQ29
	MDQ30	135	MDQA30	54	DQ30
	MDQ31	136	MDQA31	56	DQ31
	MA0	147	MAA0	25	A0
	MA1	148	MAA1	26	A1
	MA2	149	MAA2	27	A2
	MA3	152	MAA3	60	A3
	MA4	153	MAA4	61	A4
	MA5	154	MAA5	62	A5
	MA6	156	MAA6	63	A6
	MA7	157	MAA7	64	A7
	MA8	158	MAA8	65	A8
	MA9	160	MAA9	66	A9
	MA10	161	MAA10	24	A10

TC	IC3501 / RTSC		SIGNAL NAME	FP3501 (TO DVD RAM&HDD	
	Port Name	Pin No		Pin No	Port Name
3	IHDD0	251	RAMD0	24	DD0
	IHDD1	250	RAMD1	26	DD1
	IHDD2	249	RAMD2	28	DD2
	IHDD3	248	RAMD3	30	DD3
	IHDD4	246	RAMD4	32	DD4
	IHDD5	245	RAMD5	34	DD5
	IHDD6	244	RAMD6	36	DD6
	IHDD7	243	RAMD7	38	DD7
	IHDD8	239	RAMD8	37	DD8
	IHDD9	238	RAMD9	35	DD9
	IHDD10	237	RAMD10	33	DD10
	IHDD11	236	RAMD11	31	DD11
	IHDD12	235	RAMD12	29	DD12
	IHDD13	233	RAMD13	27	DD13
	IHDD14	232	RAMD14	25	DD14
	IHDD15	231	RAMD15	23	DD15

TC	IC3404 / AVENC		SIGNAL NAME	IC6001 / AV DEC&MAIN CPU	
	Port Name	Pin No		Pin No	Port Name
4	R656OUT0	296	R656ENC0	278	VDIN0
	R656OUT1	297	R656ENC1	277	VDIN1
	R656OUT2	298	R656ENC2	272	VDIN2
	R656OUT3	299	R656ENC3	271	VDIN3
	R656OUT4	301	R656ENC4	270	VDIN4
	R656OUT5	302	R656ENC5	269	VDIN5
	R656OUT6	303	R656ENC6	268	VDIN6
	R656OUT7	304	R656ENC7	266	VDIN7

TC	IC6001/AV DEC&MAIN CPU		SIGNAL NAME	IC3404 / AVENC	
	Port Name	Pin No		Pin No	Port Name
5	VDOUT0	289	R656DEC0	283	R656IN0
	VDOUT1	288	R656DEC1	284	R656IN1
	VDOUT2	286	R656DEC2	285	R656IN2
	VDOUT3	285	R656DEC3	286	R656IN3
	VDOUT4	284	R656DEC4	288	R656IN4
	VDOUT5	283	R656DEC5	289	R656IN5
	VDOUT6	282	R656DEC6	290	R656IN6
	VDOUT7	281	R656DEC7	291	R656IN7

TC	IC3501 / RTSC		SIGNAL NAME	IC6001/AV DEC&MAIN CPU	
	Port Name	Pin No		Pin No	Port Name
6	B3DATA0	46	STD0	251	STD0
	B3DATA1	47	STD1	250	STD1
	B3DATA2	48	STD2	249	STD2
	B3DATA3	49	STD3	248	STD3
	B3DATA4	53	STD4	247	STD4
	B3DATA5	54	STD5	245	STD5
	B3DATA6	55	STD6	244	STD6
	B3DATA7	56	STD7	243	STD7

TC	IC3404 / AVENC		SIGNAL NAME	IC3501 / RTSC	
	Port Name	Pin No		Pin No	Port Name
7	CD0	229	ED0	27	B2DATA0
	CD1	230	ED1	28	B2DATA1
	CD2	231	ED2	30	B2DATA2
	CD3	233	ED3	31	B2DATA3
	CD4	234	ED4	33	B2DATA4
	CD5	235	ED5	34	B2DATA5
	CD6	238	ED6	36	B2DATA6
	CD7	239	ED7	37	B2DATA7

TC	IC6701 / GLUE		SIGNAL NAME	IC6703 / DATA STRAGE	
	Port Name	Pin No		Pin No	Port Name
8	ECCD0	67	DE0	29	D0
	ECCD1	70	DE1	30	D1
	ECCD2	69	DE2	31	D2
	ECCD3	68	DE3	32	D3
	ECCD4	71	DE4	41	D4
	ECCD5	74	DE5	42	D5
	ECCD6	73	DE6	43	D6
	ECCD7	72	DE7	44	D7

IC Pin Terminal Chart (TC9 - TC12)

TC	IC6001 / AV DEC&MAIN CPU		SIGNAL NAME	IC50001 / SDRAM	
	Port Name	Pin No		Pin No	Port Name
9	MDQM0	343	DQ0	2	DQ0
	MDQM1	346	DQ1	4	DQ1
	MDQM2	348	DQ2	5	DQ2
	MDQM3	350	DQ3	7	DQ3
	MDQM4	353	DQ4	8	DQ4
	MDQM5	355	DQ5	10	DQ5
	MDQM6	358	DQ6	11	DQ6
	MDQM7	360	DQ7	13	DQ7
	MDQM8	359	DQ8	42	DQ8
	MDQM9	356	DQ9	44	DQ9
	MDQM10	354	DQ10	45	DQ10
	MDQM11	352	DQ11	47	DQ11
	MDQM12	349	DQ12	48	DQ12
	MDQM13	347	DQ13	50	DQ13
	MDQM14	344	DQ14	51	DQ14
	MDQM15	342	DQ15	53	DQ15
	MAM0	317	A0	23	A0
	MAM1	320	A1	24	A1
	MAM2	322	A2	25	A2
	MAM3	328	A3	26	A3
	MAM4	330	A4	29	A4
	MAM5	332	A5	30	A5
	MAM6	331	A6	31	A6
	MAM7	329	A7	32	A7
	MAM8	323	A8	33	A8
	MAM9	321	A9	34	A9
	MAM10	318	A10	22	A10
	MAM11	316	A11	35	A11

TC	IC6001 / AV DEC&MAIN CPU		SIGNAL NAME	IC50002 / SDRAM	
	Port Name	Pin No		Pin No	Port Name
10	MDQM16	292	DQ16	2	DQ0
	MDQM17	295	DQ17	4	DQ1
	MDQM18	297	DQ18	5	DQ2
	MDQM19	299	DQ19	7	DQ3
	MDQM20	302	DQ20	8	DQ4
	MDQM21	304	DQ21	10	DQ5
	MDQM22	308	DQ22	11	DQ6
	MDQM23	310	DQ23	13	DQ7
	MDQM24	309	DQ24	42	DQ8
	MDQM25	305	DQ25	44	DQ9
	MDQM26	303	DQ26	45	DQ10
	MDQM27	301	DQ27	47	DQ11
	MDQM28	298	DQ28	48	DQ12
	MDQM29	296	DQ29	50	DQ13
	MDQM30	293	DQ30	51	DQ14
	MDQM31	291	DQ31	53	DQ15
	MAM0	317	A0	23	A0
	MAM1	320	A1	24	A1
	MAM2	322	A2	25	A2
	MAM3	328	A3	26	A3
	MAM4	330	A4	29	A4
	MAM5	332	A5	30	A5
	MAM6	331	A6	31	A6
	MAM7	329	A7	32	A7
	MAM8	323	A8	33	A8
	MAM9	321	A9	34	A9
	MAM10	318	A10	22	A10
	MAM11	316	A11	35	A11

TC	IC6001 / AV DEC&MAIN CPU		SIGNAL NAME	IC6005,IC6006 / W-MEMORY	
	Port Name	Pin No		Pin No	Port Name
11	MD0	118	MD0	2	DQ0
	MD1	121	MD1	4	DQ1
	MD2	123	MD2	5	DQ2
	MD3	125	MD3	7	DQ3
	MD4	128	MD4	8	DQ4
	MD5	130	MD5	10	DQ5
	MD6	133	MD6	11	DQ6
	MD7	135	MD7	13	DQ7
	MD8	134	MD8	42	DQ8
	MD9	131	MD9	44	DQ9
	MD10	129	MD10	45	DQ10
	MD11	127	MD11	47	DQ11
	MD12	124	MD12	48	DQ12
	MD13	122	MD13	50	DQ13
	MD14	119	MD14	51	DQ14
	MD15	117	MD15	53	DQ15
	MA0	160	MA0	23	A0
	MA1	163	MA1	24	A1
	MA2	165	MA2	25	A2
	MA3	167	MA3	26	A3
	MA4	166	MA4	29	A4
	MA5	164	MA5	30	A5
	MA6	161	MA6	31	A6
	MA7	159	MA7	32	A7
	MA8	156	MA8	33	A8
	MA9	153	MA9	34	A9
	MA10	157	MA10	22	A10
	MA11	151	MA11	35	A11
	MA12	147	MA12	36	NC
	MA13	154	MA13	21	A12
	MA14	152	MA14	20	A13

TC	IC3501 / RTSC		SIGNAL NAME	IC3502/ SDRAM	
	Port Name	Pin No		Pin No	Port Name
12	MDQ0	281	TR MADQB0	2	DQ0
	MDQ1	280	TR MADQB1	4	DQ1
	MDQ2	278	TR MADQB2	5	DQ2
	MDQ3	277	TR MADQB3	7	DQ3
	MDQ4	276	TR MADQB4	8	DQ4
	MDQ5	274	TR MADQB5	10	DQ5
	MDQ6	273	TR MADQB6	11	DQ6
	MDQ7	272	TR MADQB7	13	DQ7
	MDQ8	270	TR MADQB8	42	DQ8
	MDQ9	269	TR MADQB9	44	DQ9
	MDQ10	268	TR MADQB10	45	DQ10
	MDQ11	266	TR MADQB11	47	DQ11
	MDQ12	265	TR MADQB12	48	DQ12
	MDQ13	264	TR MADQB13	50	DQ13
	MDQ14	263	TR MADQB14	51	DQ14
	MDQ15	262	TR MADQB15	53	DQ15
	MADR0	10	TR MAB0	23	A0
	MADR1	9	TR MAB1	24	A1
	MADR2	8	TR MAB2	25	A2
	MADR3	6	TR MAB3	26	A3
	MADR4	5	TR MAB4	29	A4
	MADR5	4	TR MAB5	30	A5
	MADR6	3	TR MAB6	31	A6
	MADR7	2	TR MAB7	32	A7
	MADR8	302	TR MAB8	33	A8
	MADR9	300	TR MAB9	34	A9
	MADR10	299	TR MAB10	22	A10
	MADR11	297	TR MAB11	35	A11
	MADR12	293	TR MAB12	36	NC

SA0 - SA25 ADDRESS BUS LINE (TC13, TC14-1, TC15-1, TC17, TC18-1, TC20)

TC	13		14-1		15-1		17		18-1		20	
SIGNAL NAME	**IC3404 / AVENC**		**IC6701 / GLUE**		**IC6001 / AVDEC&MAIN CPU**		**IC6004 / BUFFER**		**IC6003 / LOADER**		**IC3501 / RTSC**	
	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name
SA0	-	-	-	-	28	SA0	-	-	-	-	-	-
SA1	-	-	-	-	27	SA1	2	1A1	25	A0	-	-
SA2	-	-	-	-	26	SA2	4	1A2	24	A1	-	-
SA3	-	-	-	-	25	SA3	6	1A3	23	A2	-	-
SA4	-	-	-	-	24	SA4	8	1A4	22	A3	-	-
SA5	186	HA4	163	ADRL5	22	SA5	-	-	21	A4	75	HADR5
SA6	187	HA5	170	ADRL6	20	SA6	-	-	20	A5	76	HADR6
SA7	188	HA6	168	ADRL7	19	SA7	-	-	19	A6	77	HADR7
SA8	189	HA7	-	-	18	SA8	-	-	18	A7	78	HADR8
SA9	191	HA8	-	-	17	SA9	-	-	8	A8	79	HADR9
SA10	192	HA9	-	-	16	SA10	-	-	7	A9	80	HADR10
SA11	194	HA10	-	-	15	SA11	-	-	6	A10	81	HADR11
SA12	195	HA11	-	-	14	SA12	-	-	5	A11	82	HADR12
SA13	-	-	-	-	12	SA13	-	-	4	A12	85	HADR13
SA14	-	-	-	-	11	SA14	-	-	3	A13	86	HADR14
SA15	-	-	-	-	10	SA15	-	-	2	A14	87	HADR15
SA16	-	-	-	-	9	SA16	-	-	1	A15	89	HADR16
SA17	-	-	-	-	8	SA17	-	-	48	A16	90	HADR17
SA18	-	-	-	-	7	SA18	-	-	17	A17	92	HADR18
SA19	-	-	-	-	6	SA19	-	-	16	A18	93	HADR19
SA20	-	-	-	-	3	SA20	-	-	-	-	94	HADR20
SA21	-	-	-	-	2	SA21	-	-	-	-	95	HADR21
SA22	-	-	174	ADR22	1	SA22	-	-	-	-	-	-
SA23	-	-	171	ADRH0	363	SA23	-	-	-	-	-	-
SA24	-	-	172	ADRH1	362	SA24	-	-	-	-	-	-
SA25	-	-	173	ADRH2	361	SA25	-	-	-	-	-	-

SD16 - SD31 DATA BUS LINE (TC14-2, TC15-2, TC18-2)

TC	14-2		15-2		18-2	
SIGNAL NAME	**IC6701 / GLUE**		**IC6001 / AVDEC&MAIN CPU**		**IC6003 / LOADER**	
	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name
SD16	201	LDTI0	67	SD16	29	I/O0
SD17	200	LDTI1	66	SD17	31	I/O1
SD18	199	LDTI2	65	SD18	33	I/O2
SD19	202	LDTI3	64	SD19	35	I/O3
SD20	197	LDTI4	63	SD20	38	I/O4
SD21	196	LDTI5	62	SD21	40	I/O5
SD22	198	LDTI6	61	SD22	42	I/O6
SD23	195	LDTI7	59	SD23	44	I/O7
SD24	194	LDTI8	58	SD24	30	I/O8
SD25	192	LDTI9	57	SD25	32	I/O9
SD26	191	LDTI10	56	SD26	34	I/O10
SD27	189	LDTI11	55	SD27	36	I/O11
SD28	190	LDTI12	54	SD28	39	I/O12
SD29	188	LDTI13	53	SD29	41	I/O13
SD30	187	LDTI14	51	SD30	43	I/O14
SD31	185	LDTI15	50	SD31	45	I/O15

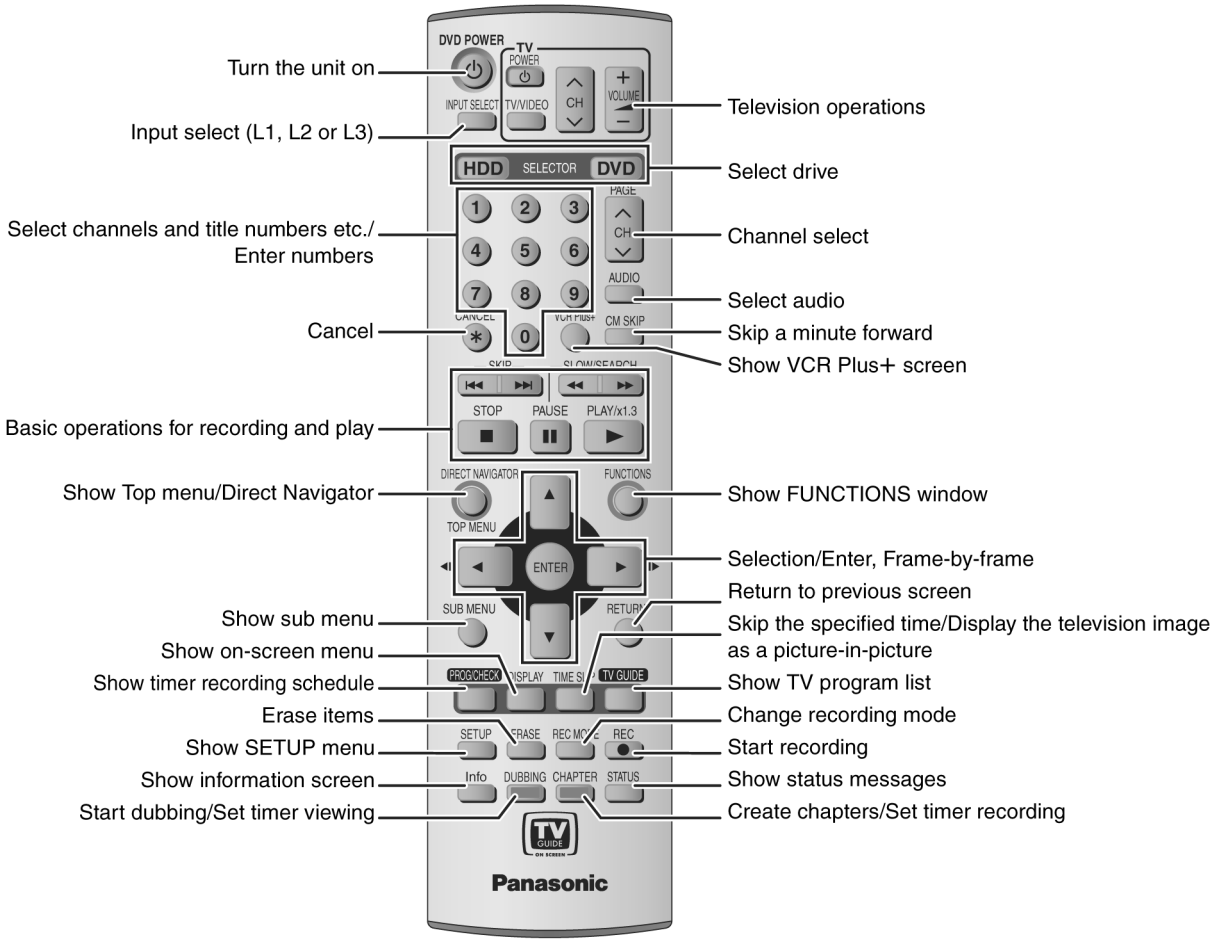
MSD16 - MSD31 DATA BUS LINE (TC19-1, TC21-1,TC22-1)

TC	19-1		21-1		22-1	
SIGNAL NAME	**IC3404 / AVENC&RTSC**		**IC3501 / RTSC**		**IC6701 / GLUE**	
	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name
MSD16	203	HD0	118	HDAT0	12	LDEV0
MSD17	204	HD1	117	HDAT1	13	LDEV1
MSD18	206	HD2	115	HDAT2	11	LDEV2
MSD19	207	HD3	114	HDAT3	10	LDEV3
MSD20	209	HD4	113	HDAT4	7	LDEV4
MSD21	210	HD5	111	HDAT5	8	LDEV5
MSD22	212	HD6	110	HDAT6	9	LDEV6
MSD23	213	HD7	109	HDAT7	14	LDEV7
MSD24	215	HD8	107	HDAT8	2	LDEV8
MSD25	216	HD9	106	HDAT9	4	LDEV9
MSD26	217	HD10	104	HDAT10	3	LDEV10
MSD27	218	HD11	102	HDAT11	208	LDEV11
MSD28	220	HD12	101	HDAT12	207	LDEV12
MSD29	221	HD13	100	HDAT13	6	LDEV13
MSD30	223	HD14	98	HDAT14	205	LDEV14
MSD31	224	HD15	97	HDAT15	203	LDEV15

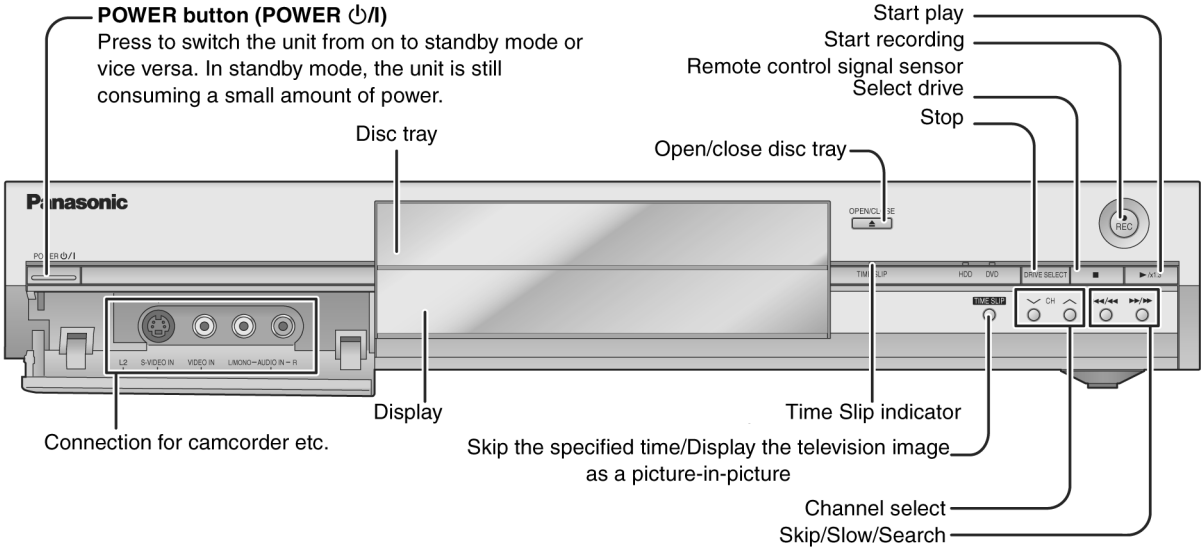
MSA1 - MSA4 ADDRESS BUS LINE (TC16, TC19-2, TC21-2, TC22-2)

TC	16		19-2		21-2		22-2	
SIGNAL NAME	**IC6004/BUFFER**		**IC3404/AVENC**		**IC3501/RTSC**		**IC6701/GLUE**	
	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name
MSA1	18	1Y1	181	HA0	68	HADR1	167	ADRL1
MSA2	16	1Y2	182	HA1	69	HADR2	164	ADRL2
MSA3	14	1Y3	183	HA2	70	HADR3	165	ADRL3
MSA4	12	1Y4	184	HA3	71	HADR4	166	ADRL4

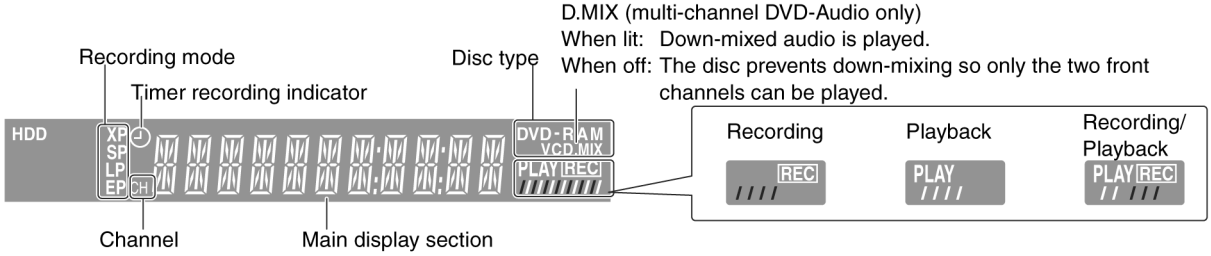
Remote control



Main unit



The unit's display



:REC SIGNAL　　:PB SIGNAL

IC4001
(AUDIO SOUND PROCESSOR)

TU7401
U/V TUNER PACK
L OUT 27
R OUT 26
TUNER L
TUNER R

JK3901
A/V IN JACK
AUDIO
LINE IN L 16
JSB IN L 17
LINE IN R 19
JSB IN R 20
L1 IN L
L3 IN L
L1 IN R
L3 IN R

JK3904
FRONT A/V IN JACK
AUDIO
L 5
2
R 3
L2 IN L
L2 IN R

FROM DIGITAL BLOCK SECTION
P9001 P7402 62 MIXLOUT DM
P9001 P7402 58 MIXROUT DM
P9001 P7402 72 IECOUT

FROM DIGITAL P.C.B. AUDIO I/O SECTION
IC7501- 20 XTMUTE
P9001 P7402 70 XDMUTE

TUIL 2
TUIR 3
EXT21 11
EXT31 13
EXT22 12
EXT32 14
FRONT1 32
FRONT2 31
DAR 25
DAL 26
0.8,12dB
INPUT SELECTOR
-6.1dB
0.5dB
OUTL 29
OUTR 28
RFOUT 24
LS 27
I²C BUS LOGIC
SCL 20
SDA 21
17

IIC CLOCK
IIC DATA
P7402 P9001 21
P7402 P9001 19
TO/FROM DIGITAL P.C.B. GLUE SECTION

AADC L
AADC R
P7402 P9001 50
P7402 P9001 48
TO DIGITAL BLOCK SECTION

JK3903
DIGITAL AUDIO OUT
OPTICAL 23
IEC OUT

JK3902
A/V OUT JACK
MIX L OUT1
MIX L OUT2
MIX R OUT1
MIX R OUT2
OUT1-L 16
OUT2-L 17
OUT1-R 19
OUT2-R 20
LINE

QR4001,4004 SWITCH
QR4002,4003 SWITCH
Q4001 MUTE
(5V)
D4001
D4002
Q4002 MUTE
Q4003 MUTE
Q4004 MUTE
Q4005 MUTE

DMR-E85HP/PC
Analog Audio
Block Diagram

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

D 3.3V
DGND
LB4401 J0JGC0000020
768FS1
R4419 0
R4418 0
R4420 0
R4421 0
R4422 0
R4451 0
R4452 0
R4450 0
R4453 5600
C4432 0.1
X1DA LP
DEC SCK
DEC SDTO
XDMUTE
XRESET
D4401 MA3Z142K0LG
C4434 0.1
C4433 16V10
IC4404 C0FBBK000035 (D/A CONVERTER)
SCK MLI MCI MDI NC ZEROA VCOM AGND
C4411 10V10
C4412 6V47
BCK DATA LRCK DGND VDD VCC VOUTL VOUTR
C4421 1000P
C4422 1000P
C4423 1000P
C4424 1000P
C4425 1000P
C4426 1000P
IC4408 C0JBAD000107 (XD MUTE OUT)
VCC OUTY INB INA GND
R4457 0
IC4409 C0CBCBD00002 (REG.DAC+3.3V)
OUT GND NR VIN GND ON
R4426 0
R4427 0
AMUTE
MIXROUT DM
MIXLOUT DM
FL4403 F1H0J4740004
R4423 0
R4424 0
R4425 0
LRCK
DMIX
DACBCK
LB4404 J0JGC0000020
FL4405 F1H0J4740004
LB4405 J0JHC0000032
AU 5V
C4415 0.1
C4416 6V330
C4417 0.1
C4418 6V100
C4414 0.1
C4413 6V100
FL4404 F1H0J4740004
LB4403 J0JGC0000020
R4438 0
R4439 0
ENCMCK2
ADDATA
LB4402 J0JGC0000020
R4454 0
R4455 0
ADBCK
R4428 0
R4434 0
AADC L
IC4406 C0FBAK000008 (A/D CONVERTER)
MODE1 MODE0 FMT1 FMT0 TEST SCKI VDD DGND DOUT BCK
VINL VINR VREF1 VREF2 VCC AGND XPDWN BYPAS FSYNC LRCK
IC4407 C0JBAA000257
VCC OUTY INA INB GND
R4433 0
R4435 0
AADC R
R4436 220
C4429 0.1
R4437 0
R4456 0
ADLRCK
C4428 0.1
C4427 6V47
C4431 0.1
C4430 10V10
XADC PD
AUGND

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Audio I/O Section(Digital P.C.B.(5/5))
Schematic Diagram(AI)

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

P X SW 5.8V
P X SW 13V
K4008 VWJ0023=5
AU 5V M
C4046 0.1
C4049 6V470
IC4004 C0CBCDC00026 (REG.AU+5V)
VIN VOUT ON GND NR
C4047 0.1
R4077 0
C4045 0.1
C4052 16V470
IC4005 C0CBCDC00027 (REG.AU+9V)
C4050 0.1
R4078 0
K4007 VWJ0023=5
C4037 16V220
T POWER ON H
K4005 VWJ0023=10
M MIXLOUT DM
M MIXROUT DM
M AADC R
M AADC L
C4028 16V1
C4029 16V1
R4046 6200
R4045 6200
R4043 3900
R4044 3900
V L2 IN R
V L2 IN L
R4037 100K
R4038 100K
C4027 50V1
C4026 50V1
T METER R
T METER L
M IIC CLK
M IIC DATA
R4024 100
R4025 100
R4020 0
R4019 0
R4075 0
R4074 0
C4025 16V47
C4024 16V47
R4029 6200
R4027 6200
R4028 12K
R4026 12K
C4019 82P
C4017 82P
C4022 0.1
C4023 16V470
R4032 1K
R4031 1K
C4016 16V220
IC4001 C1AB00001920 (AUDIO SOUND PROCESSOR)
FRONT1 FRONT2 VCC OUTL OUTR LS DAL DAR RFOUT REGFIL GND SDA SCL POFF H DCI DCI
TUIL TUIR CAP1 NC TUOL TUOR CAP2 EXT11 EXT12 EXT21 EXT22 EXT31 EXT32 DETL DETR
R4082 0
C4010 0.1
C4004 50V1
C4003 50V1
C4006 50V1
C4005 50V1
M TUNER L
M TUNER R
R4017 0
R4018 0
C4014 50V1
C4013 50V1
R4015 100K
R4016 100K
C4010 0.1
C4009 0.1
R4012 1K
R4011 1K
R4014 1K
R4013 1K
R4008 0
V L1 IN L
V L1 IN R
V L3 IN L
V L3 IN R
R4004 100K
R4003 100K
R4002 100K
R4001 100K
R4042 0
C4038 16V47
R4059 47K
R4061 680
R4062 680
R4069 220
R4070 220
MIX L OUT2 V
MIX L OUT1 V
C4039 1000P
C4041 1000P
D4001 MA3Z142D0RG
R4063 2700
R4064 2700
Q4002 2SD132800L (MUTE)
Q4003 2SD132800L (MUTE)
D4002 MA3Z142D0LG
R4067 2700
R4068 2700
Q4004 2SD132800L (MUTE)
Q4005 2SD132800L (MUTE)
R4039 0
C4036 16V47
R4060 47K
R4066 680
R4065 680
C4040 1000P
C4042 1000P
R4072 220
R4071 220
MIX R OUT2 V
MIX R OUT1 V
X SW 5.2V P
R4052 10K
Q4001 2SB1218A0L (MUTE)
R4051 10K
R4050 10K
R4049 10K
AU GND M V
GND P
QR4004 UNR521100L (MUTE)
QR4003 UNR521100L (MUTE)
QR4001 UNR521100L (MUTE)
XTMUTE T
QR4002 UNR521100L (MUTE)
XDMUTE M
K4001 VWJ0023=5

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Audio Main Section(Main P.C.B.(4/5))
Schematic Diagram(A)

FRONT(R)P.C.B.

S7819 CH-UP
S7820 TIME-WARP
S7821 PLAY
S7822 SELECT
S7809 CH-DOWN
S7811 REC
S7812 STOP
S7813 SKIP-R
S7801 OPEN/CLOSE
S7802 SKIP-F
POWER S7501

P7801 P7504 2 → 104 KEY IN3
P7801 P7504 1 → 67 KEY IN2
P7801 P7504 3 → 96 KEY IN1

IR7801 REMOTE CTL. SENSOR
N SW+5V
P7801 P7504 11 → 2 IR

HDD
N SW+5V D7512
Q7520 (LED DRIVE)
78 HDD LED

N SW+5V
TIME-WARP D7801 QR7801 (LED DRIVE)
P7801 P7504 4 → 74 TIME WARP LED
P7801 P7504 5 → 73 HDD SEL LED
DVD D7806 QR7806 (LED DRIVE)
P7801 P7504 10 → 65 DVD LED R
P7801 P7504 7 → 70 DVD SEL LED
HDD/SD SEL D7804 QR7804 (LED DRIVE)
P7801 P7504 8 → 68 SD SEL LED
DVD/PC SEL D7805 QR7805 (LED DRIVE)
P7801 P7504 9 → 67 PC SEL LED

IC7503 (RESET)
XSW 5.2V → 2 VDD OUT 1 → 80 P FAIL Ⓛ

X SW+5.2V D7507
D7511
B7501 BACK UP BATTERY
69 VCC

IC7501 (TIMER)

IC7502 (DISPLAY DRIVE)
FL RESET 64 → 1 RESET
FL CS 67 → 2 CS
FL CLK 6 → 3 SCK
FL TXD 4 → 4 SDATA
FL RXD 5
DIG00 63 · DIG07 56
SEG00 44 · SEG09 35
SEG19 25 · SEG25 19
SEG26 17 · SEG31 12
SEG35 45 · SEG41 51

DIG00-DIG07 SEG00-SEG41 → DP7501 FIP DISPLAY
F+ F- → T7501 DISPLAY REGULATOR

XSW+5.2V
FILAMENT ON Ⓛ 49 → QR7507
Q7517 FIP CONTROL

X SW13V
IC7506 (FAN MOTOR DRIVE)
FAN PWM OUT 23 → 5 B+IN A OUT 1
Q7512 (FAN MOTOR SWITCH)
IP7501 IC PROTECTOR
FANPWM P7503 1 / P7503 3 → FAN MOTOR
FAN LOCK 24

P SAVE Ⓛ 56 → P SAVE Ⓛ
POWER ON Ⓗ 58 → POWER ON Ⓗ
DR P ON Ⓗ 66 → DR P ON Ⓗ
JC P ON Ⓗ 59 → JC P ON Ⓗ
SYS PFAIL Ⓗ 61 → SYS PFAIL Ⓗ
TO/FROM POWER BLOCK SECTION

X IN 14 — X7501 10MHz (MAIN CLK) — X OUT 12
XC IN 9 — X7502 32.768KHz (REAL TIME CLK) — XC OUT 10

XT MUTE 20 → XT MUTE
TO AUDIO BLOCK SECTION

SYNC IN 109 → SLICER VIDEO
CV IN 113
L1 SWIDE 39 → L123 SWIDE
FROM VIDEO BLOCK SECTION

DMR-E85HP/PC
Analog Timer
Block Diagram

:REC SIGNAL :PB SIGNAL

IC3001
(VIDEO PROCESSOR)

FROM DIGITAL BLOCK SECTION

P9001 P7402 18 COUT DM → 41 DVD C IN → BIAS → 6M LPF
P9001 P7402 22 YOUT DM → 29 DVD Y IN → CLAMP → 6M LPF
P9001 P7402 26 GPY YOUT DM → 47 DVD G/Py IN → SW1 (BIAS / CLAMP)
P9001 P7402 30 BPB CBOUT DM → 51 DVD B/Pb IN → BIAS → 6M LPF
P9001 P7402 34 RPR CROUT DM → 43 DVD R/Pr IN → BIAS → 6M LPF

SW2: 6M LPF / 12M LPF

DRV MIX

Py/G SW, Pb/B SW, Pr/R/C SW

75 → C75 OUT 30 → CPN C OUT
75 → V75 OUT 28 / V75 SAG 29 → CPS V OUT
75 → Y75 OUT 26 / Y75 SAG 27 → CPN Y OUT
75 → Py/G OUT 37 / Py/G SAG 36 → GPC Y OUT
75 → Pb/B OUT 33 / Pb/B SAG 32 → BPC B OUT
75 → Pr/R/C OUT 35 / Pr/R/C SAG 34 → RPC R OUT

JK3902
A/V OUT
JACK

13 VIDEO1 / 14 VIDEO2 — LINE OUT
9 Y, 10 C — S1/S2 OUT 1
3 Y, 4 C — S1/S2 OUT 2

FROM/TO DIGITAL GLUE SECTION

P9001 P7402 19 IIC DATA → 57 SDA
P9001 P7402 21 IIC CLOCK → 58 SCL

S1/S2 DET3 16
S1/S2 DET1 23
S1/S2 DET2 9

I²C-BUS CONTROL

DET OUT A 8 → L123 SWIDE → IC7501- 99
S1/S2 OUT 31

JK3903
COMPONENT
VIDEO OUT
(480P/480I)

20 Y(GREEN)
19 PB/CB (BLUE)
18 PR/CR (RED)

TU7401
U/V TUNER PACK
VIDEO OUT 18 → Q7401 AMP → TU V IN → TUNER 3 → CLAMP

JK3901
A/V IN
JACK

L3 VIDEO IN 14 → LINE 3V IN → VIDEO3 IN 12 → CLAMP
L1 VIDEO IN 13 → LINE 1V IN → VIDEO1 IN 19 → CLAMP
C 4 → CPN 3C IN → C3 IN 17 → BIAS
Y 3 → CPN 3Y IN → Y3 IN 14 → CLAMP
L3 S-VIDEO IN 6 → C/S DET3 → 13
C 10 → CPN 1C IN → C1 IN 24 → BIAS
Y 9 → CPN 1Y IN → Y1 IN 21 → CLAMP
L1 S-VIDEO IN 11 → C/S DET1 → 20

V-SW A, SW A (V / Y), Y-SW A, C-SW A, MIX A

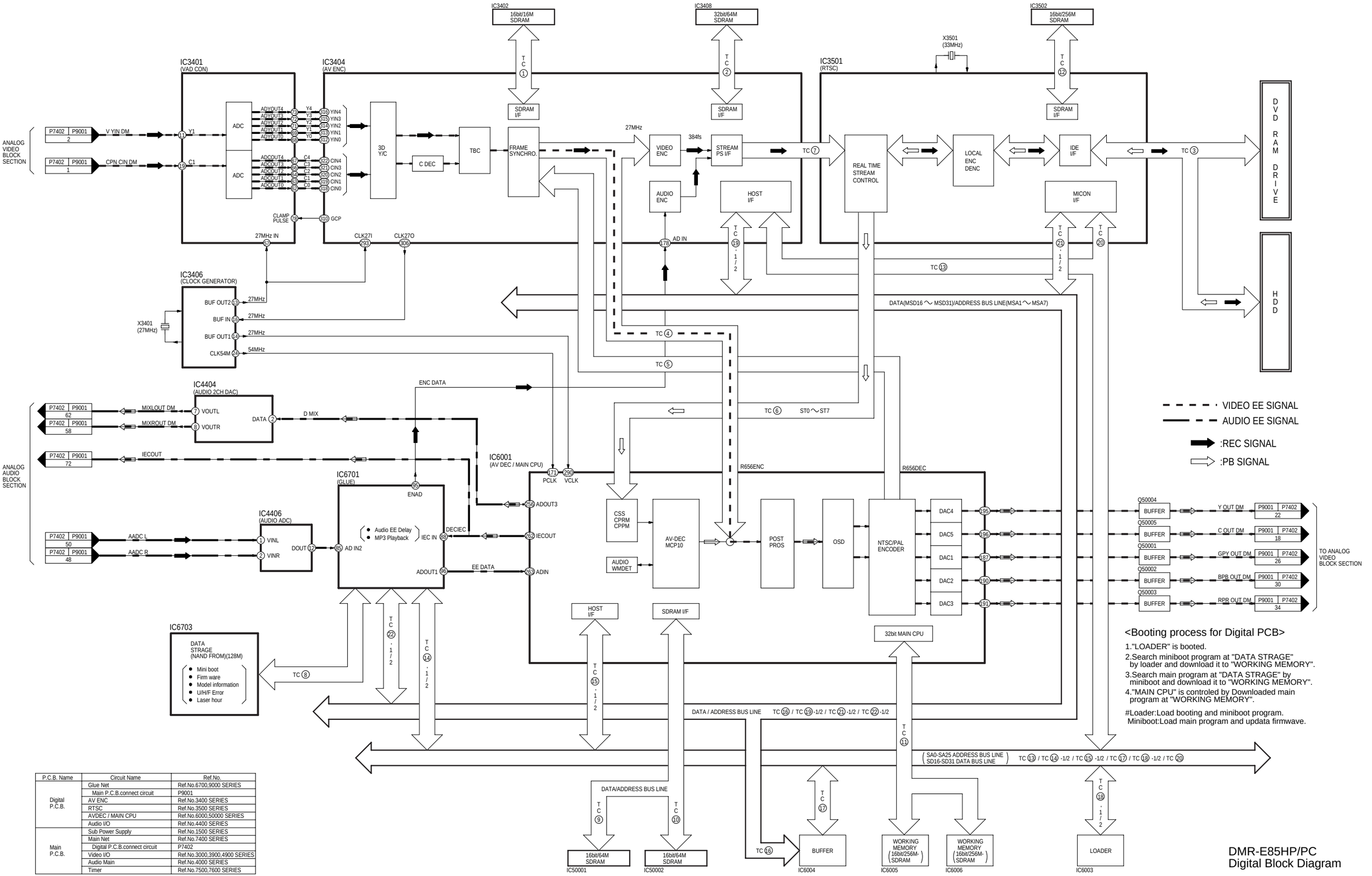
SLICER VIDEO A 67 → Q7507 AMP → IC7501- 109, 113

JK3904
FRONT A/V IN JACK

L2 VIDEO IN 7 → LINE 2V IN → VIDEO2 IN 5 → CLAMP
C 12 → CPN 2C IN → C2 IN 10 → BIAS
Y 11 → CPN 2Y IN → Y2 IN 7 → CLAMP
L2 S-VIDEO IN 6 → C/S DET2 → 6

COUT A 69 (0dB) → CPNCIN DM → P7402 P9001 1
Y/V OUT A 65 (0dB) → V YIN DM → P7402 P9001 2
→ TO DIGITAL BLOCK SECTION

DMR-E85HP/PC
Analog Video
Block Diagram



<Booting process for Digital PCB>

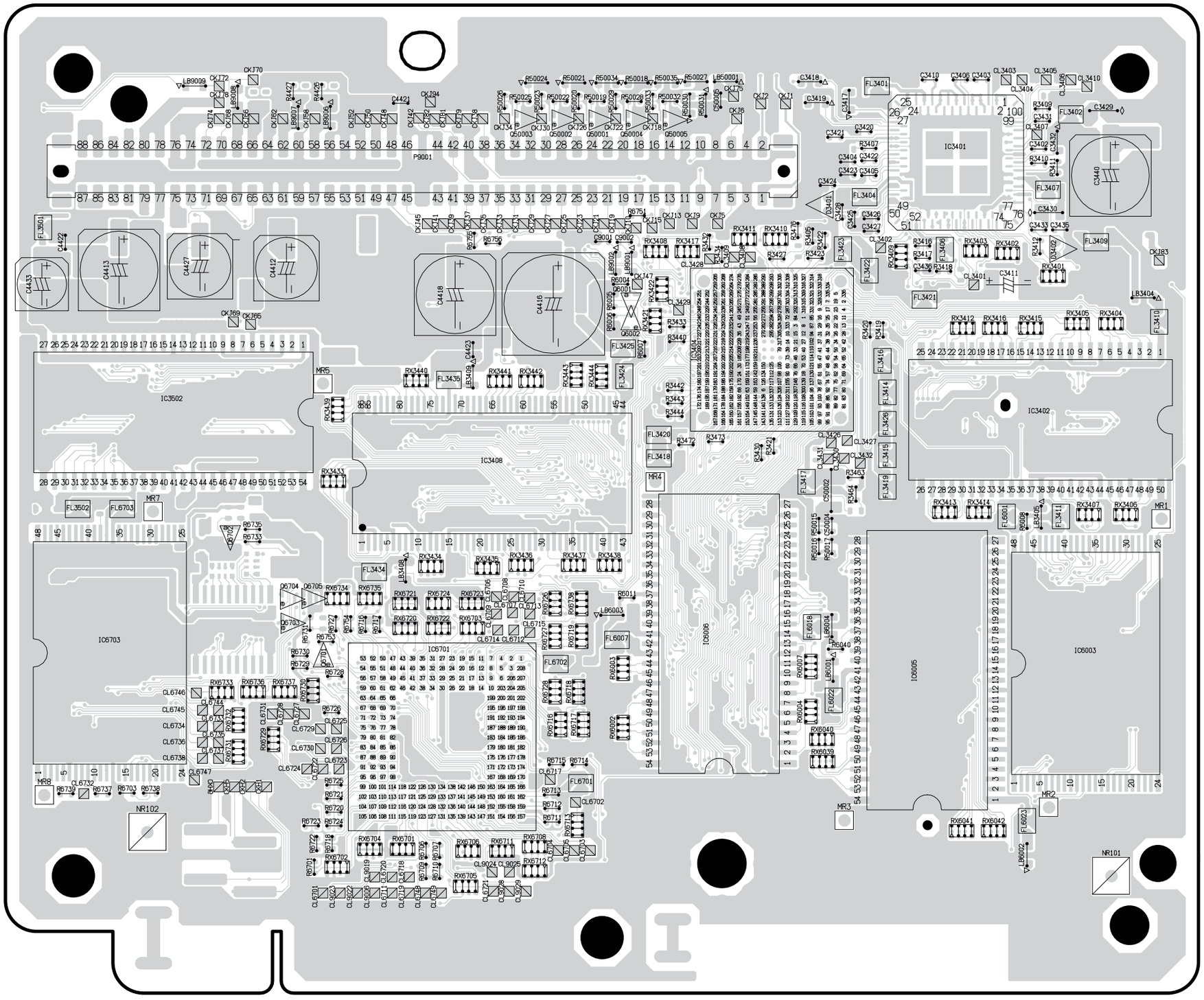
1."LOADER" is booted.
2.Search miniboot program at "DATA STRAGE" by loader and download it to "WORKING MEMORY".
3.Search main program at "DATA STRAGE" by miniboot and download it to "WORKING MEMORY".
4."MAIN CPU" is controled by Downloaded main program at "WORKING MEMORY".

#Loader:Load booting and miniboot program.
Miniboot:Load main program and updata firmwave.

P.C.B. Name	Circuit Name	Ref.No.
Digital P.C.B.	Glue Net	Ref.No.6700,9000 SERIES
	Main P.C.B.connect circuit	P9001
	AV ENC	Ref.No.3400 SERIES
	RTSC	Ref.No.3500 SERIES
	AVDEC / MAIN CPU	Ref.No.6000,50000 SERIES
	Audio I/O	Ref.No.4400 SERIES
Main P.C.B.	Sub Power Supply	Ref.No.1500 SERIES
	Main Net	Ref.No.7400 SERIES
	Digital P.C.B.connect circuit	P7402
	Video I/O	Ref.No.3000,3900,4900 SERIES
	Audio Main	Ref.No.4000 SERIES
	Timer	Ref.No.7500,7600 SERIES

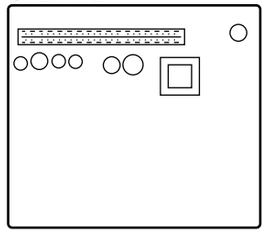
DMR-E85HP/PC
Digital Block Diagram

DIGITAL P.C.B.



(COMPONENT SIDE)

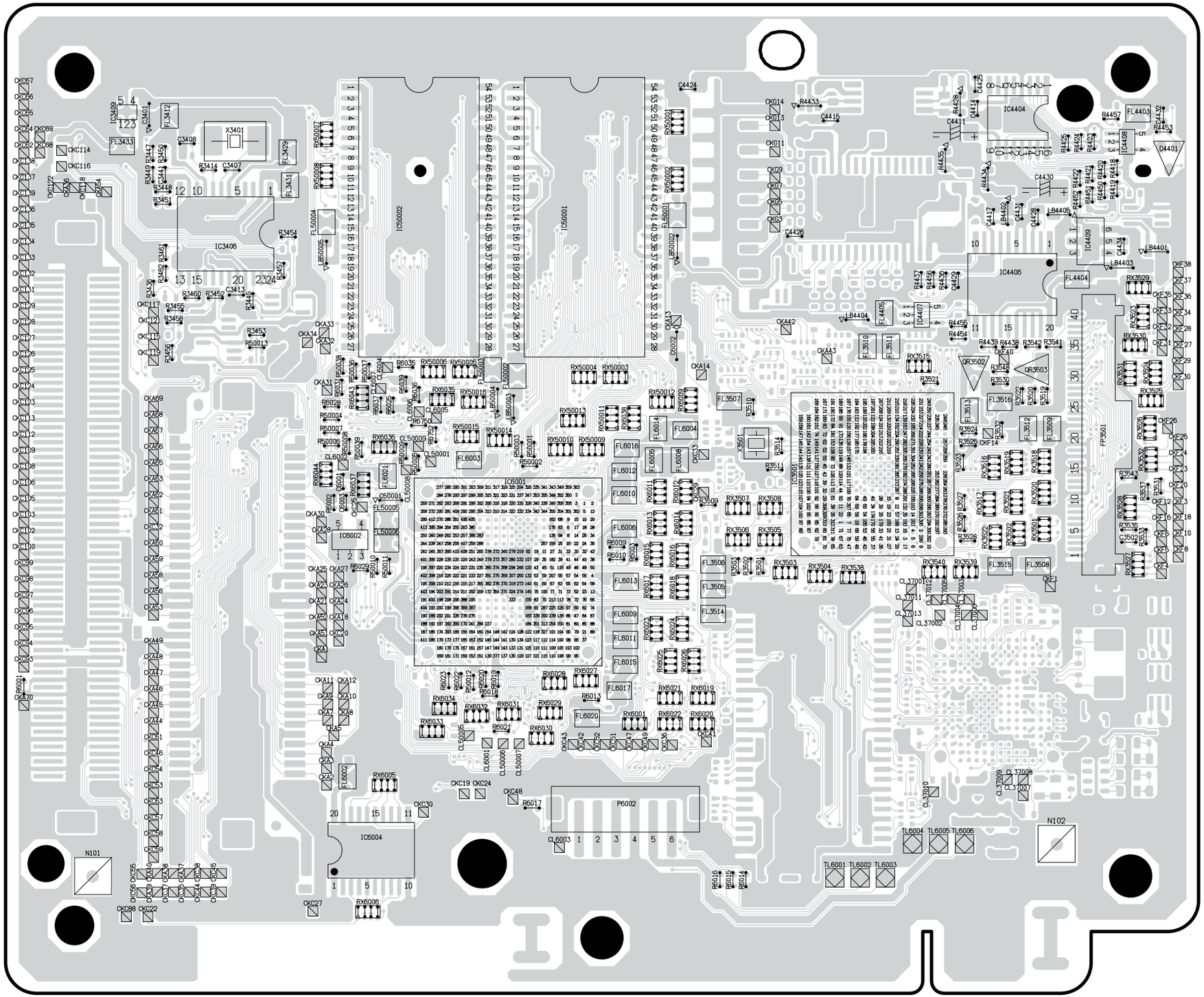
OVER VIEW



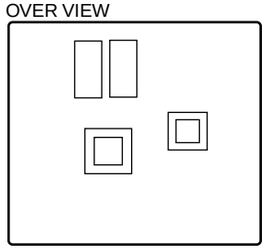
*IC6703 is not supplied in the form of an individual part.
When replacing, be sure to replace the Digital P.C.B. and not IC6703 singly.

DMR-E85HP/PC
Digital P.C.B. (Component Side)
(E85HP: REP3774G, E85HPC: RFKBE85HPC)

DIGITAL P.C.B.



OVER VIEW



(FOIL SIDE)

DMR-E85HP/PC
Digital P.C.B. (Foil Side)
(E85HP: REP3774G, E85HPC: RFKBE85HPC)

DIGITAL P.C.B.

Integrated Circuit

IC3401	E-6	C
IC3402	D-6	C
IC3404	D-5	C
IC3406	E-2	F
IC3408	D-3	C
IC3409	E-1	F
IC3501	D-5	F
IC3502	D-2	C
IC4404	E-6	F
IC4406	E-6	F
IC4407	D-6	F
IC4408	E-7	F
IC4409	E-7	F
IC6001	C-3	F
IC6002	C-3	F
IC6003	C-6	C
IC6004	B-3	F
IC6005	C-6	C
IC6006	C-5	C
IC6701	B-3	C
IC6703	C-1	C
IC50001	E-4	F
IC50002	E-3	F

Transistor

Q6001	D-4	C
Q6002	D-4	C
Q6701	C-2	C
Q6702	C-2	C
Q6703	C-2	C
Q6704	C-2	C
Q6705	C-2	C
Q50001	E-4	C
Q50002	E-4	C
Q50003	E-4	C
Q50004	E-4	C
Q50005	E-4	C

Transistor-resistor

QR3502	D-6	F
QR3503	D-6	F

Test Point

CKA1	C-2	F
CKA2	B-2	F
CKA3	B-2	F
CKA4	B-2	F
CKA5	B-3	F
CKA7	B-2	F
CKA8	B-3	F
CKA9	B-2	F
CKA10	B-3	F
CKA11	B-2	F
CKA12	B-3	F
CKA13	D-4	F
CKA14	D-4	F
CKA18	C-3	F
CKA21	C-2	F
CKA23	C-2	F
CKA24	C-3	F
CKA25	C-2	F
CKA26	C-3	F
CKA27	C-3	F
CKA28	C-2	F
CKA30	C-2	F
CKA31	D-2	F
CKA32	D-2	F
CKA33	D-2	F
CKA34	D-2	F
CKA36	E-1	F
CKA37	A-2	F
CKA38	A-2	F
CKA39	A-2	F
CKA40	A-2	F
CKA42	D-5	F
CKA43	D-5	F
CKA44	B-2	F
CKA45	B-2	F
CKA46	B-2	F
CKA47	B-2	F
CKA48	C-2	F
CKC25	C-3	F
CKC27	A-2	F
CKC29	C-4	F
CKC30	B-3	F
CKC32	C-2	F
CKC33	D-4	F
CKC35	A-2	F
CKC36	B-4	F
CKC37	A-2	F
CKC38	A-2	F
CKC39	A-2	F
CKC41	B-4	F
CKC42	B-4	F
CKC43	B-4	F
CKC44	A-2	F
CKC45	A-2	F
CKC46	B-2	F
CKC47	B-4	F
CKC48	B-3	F
CKC49	B-4	F
CKC51	B-4	F
CKC52	B-4	F
CKC53	B-2	F
CKC54	B-2	F
CKC55	A-2	F
CKC56	A-2	F
CKC57	B-2	F
CKC58	B-2	F
CKC59	B-2	F
CKC61	B-2	F
CKC62	E-1	F
CKC63	B-2	F
CKC64	E-1	F
CKC65	E-1	F
CKC66	E-1	F
CKC67	F-1	F
CKC68	E-1	F
CKC69	E-1	F
CKC88	A-1	F
CKC93	C-1	F
CKC94	C-1	F
CKC95	C-1	F
CKC96	C-1	F
CKC97	C-1	F
CKC98	C-1	F
CKC99	C-1	F
CKC100	C-1	F
CKC102	C-1	F
CKC103	C-1	F
CKC105	C-1	F
CKC106	C-1	F
CKC108	D-1	F
CKC109	D-1	F
CKC112	D-1	F
CKC113	D-1	F
CKC114	E-1	F
CKC115	D-2	F
CKC116	E-1	F
CKC117	D-2	F
CKC118	E-1	F
CKC119	D-2	F
CKC121	D-2	F
CKC122	E-1	F
CKC123	D-1	F
CKC124	D-1	F
CKC125	D-1	F
CKC126	D-1	F
CKC127	D-1	F
CKC128	D-1	F
CKC129	D-1	F
CKC131	D-1	F
CKC132	E-1	F
CKC133	E-1	F
CKC134	E-1	F
CKC135	E-1	F
CKC136	E-1	F
CKC137	E-1	F
CKC138	E-1	F
CKC139	E-1	F
CKF1	C-6	F
CKF3	C-7	F
CKF4	C-7	F
CKF5	C-7	F
CKF6	C-7	F
CKF8	C-7	F
CKF10	C-7	F
CKF12	C-7	F
CKF14	D-6	F
CKF16	C-7	F
CKF18	C-7	F
CKF20	C-7	F
CKF23	D-7	F
CKF24	D-7	F
CKF25	D-7	F
CKF26	D-7	F
CKF27	D-7	F
CKF28	D-7	F
CKF29	D-7	F
CKF30	D-7	F
CKF31	D-7	F
CKF32	D-7	F
CKF33	D-7	F
CKF34	D-7	F
CKF35	D-7	F
CKF36	D-7	F
CKF37	E-7	F
CKF38	E-7	F
CKF40	D-6	F
CKG3	E-5	F
CKG5	E-5	F
CKG7	E-5	F
CKG9	E-5	F
CKG11	E-5	F
CKG13	E-5	F
CKG14	E-5	F
CKH1	B-2	C
CKH2	B-2	C
CKH5	B-2	C
CKH6	B-2	C
CKJ1	E-5	C
CKJ2	E-5	C
CKJ5	E-5	C
CKJ6	E-5	C
CKJ9	E-4	C
CKJ10	E-4	C
CKJ13	E-4	C
CKJ15	E-4	C
CKJ18	E-4	C
CKJ19	E-4	C
CKJ21	E-4	C
CKJ22	E-4	C
CKJ23	E-4	C
CKJ25	E-4	C
CKJ26	E-4	C
CKJ27	E-4	C
CKJ29	E-4	C
CKJ30	E-4	C
CKJ31	E-4	C
CKJ33	E-3	C
CKJ34	E-3	C
CKJ35	E-3	C
CKJ37	E-3	C
CKJ38	E-3	C
CKJ39	E-3	C
CKJ41	E-3	C
CKJ42	E-3	C
CKJ45	E-3	C
CKJ47	E-4	C
CKJ48	E-3	C
CKJ50	E-3	C
CKJ52	E-3	C
CKJ58	E-2	C
CKJ62	E-2	C
CKJ65	D-2	C
CKJ66	E-2	C
CKJ68	E-2	C
CKJ69	D-2	C
CKJ70	F-2	C
CKJ72	F-2	C
CKJ74	E-2	C
CKJ75	F-5	C
CKJ78	E-2	C
CKJ79	E-3	C
CKJ81	E-3	C
CKJ82	E-3	C
CKJ83	E-7	C
CKJ94	E-3	C
CL3401	E-6	C
CL3402	E-5	C
CL3403	F-6	C
CL3404	F-6	C
CL3405	F-6	C
CL3406	F-6	C
CL3407	E-6	C
CL3408	E-5	C
CL3409	E-5	C
CL3410	F-6	C
CL3426	D-5	C
CL3427	D-5	C
CL3428	E-5	C
CL3429	D-4	C
CL3430	D-5	C
CL3431	E-5	C
CL3432	D-5	C
CL6001	B-3	F
CL6002	D-3	F
CL6003	B-4	F
CL6004	D-3	F
CL6005	D-3	F
CL6006	D-3	F
CL6007	D-3	F
CL6701	A-2	C
CL6702	B-4	C
CL6703	B-4	C
CL6704	B-4	C
CL6705	B-4	C
CL6706	C-3	C
CL6707	C-3	C
CL6708	C-3	C
CL6709	C-3	C
CL6710	C-4	C
CL6711	A-3	C
CL6712	C-3	C
CL6713	C-4	C
CL6714	C-3	C
CL6715	C-4	C
CL6717	B-4	C
CL6718	A-3	C
CL6719	A-3	C
CL6720	A-3	C
CL6721	A-3	C
CL6722	B-2	C
CL6723	B-3	C
CL6724	B-2	C
CL6725	B-3	C
CL6726	B-3	C
CL6727	B-2	C
CL6728	B-2	C
CL6729	B-2	C
CL6730	B-2	C
CL6731	B-2	C
CL6732	B-1	C
CL6733	B-2	C
CL6734	B-2	C
CL6735	B-2	C
CL6736	B-2	C
CL6737	B-2	C
CL6738	B-2	C
CL6744	B-2	C
CL6745	B-2	C
CL6746	B-2	C
CL6747	B-2	C
CL6748	A-3	C
CL6749	A-3	C
CL9006	A-3	C
CL9019	A-3	C
CL9022	A-3	C
CL9023	A-3	C
CL9024	A-3	C
CL9025	A-3	C
CL9028	A-3	C
CL9029	A-4	C
CL37001	C-6	F
CL37002	C-6	F
CL37003	C-6	F
CL37004	C-6	F
CL37005	C-6	F
CL37006	C-6	F
CL37007	B-6	F
CL37008	B-6	F
CL37009	B-6	F
CL37010	B-6	F
CL37011	C-6	F
CL37012	C-6	F
CL37013	C-6	F
CL50001	D-3	F
CL50005	B-3	F
CL50006	B-3	F
CL50007	B-4	F
CL50008	D-3	F
CL50009	D-3	F
TL6001	A-5	F
TL6002	A-5	F
TL6003	A-5	F
TL6004	B-6	F
TL6005	B-6	F
TL6006	B-6	F

Connector

FP3501	D-7	F
P6002	B-4	F
P9001	E-3	C

Diode

D3401	E-5	C
D3402	E-6	C
D4401	E-7	F

Crystal Osillator

X3401	E-2	F
X3501	D-5	F

Coil

LB3404	D-7	C
LB3405	C-6	C
LB3408	C-3	C
LB3409	D-3	C
LB4401	E-7	F
LB4402	E-6	F
LB4403	E-7	F
LB4404	D-5	F
LB4405	E-6	F
LB6001	C-5	C
LB6002	B-6	C
LB6003	C-4	C
LB6004	C-5	C
LB9001	E-4	C
LB9002	E-4	C
LB9006	E-3	C
LB9007	E-2	C
LB9008	F-2	C
LB9009	F-2	C
LB50001	F-5	C
LB50002	E-4	F
LB50003	D-3	F
LB50004	D-3	F
LB50005	E-2	F

Filter

FL3401	F-5	C
FL3402	E-6	C
FL3404	E-5	C
FL3406	E-6	C
FL3407	E-6	C
FL3409	E-7	C
FL3410	D-7	C
FL3411	C-6	C
FL3412	E-2	F
FL3414	D-5	C
FL3415	D-5	C
FL3416	D-5	C
FL3417	C-5	C
FL3418	D-4	C
FL3419	C-5	C
FL3420	D-4	C
FL3421	D-6	C
FL3422	E-5	C
FL3423	E-5	C
FL3424	D-4	C
FL3425	D-4	C
FL3426	D-5	C
FL3429	E-2	F
FL3431	E-2	F
FL3433	E-1	F
FL3434	C-3	C
FL3435	D-3	C
FL3501	E-1	C
FL3502	C-1	C
FL3505	C-5	F
FL3506	C-5	F
FL3507	D-5	F
FL3508	C-6	F
FL3509	D-6	F
FL3510	D-5	F
FL3511	D-5	F
FL3512	D-6	F
FL3513	D-6	F
FL3514	C-5	F
FL3515	C-6	F
FL3516	D-6	F
FL4403	E-7	F
FL4404	E-6	F
FL4405	D-5	F
FL6001	C-6	C
FL6002	B-3	F
FL6003	D-3	F
FL6004	D-4	F
FL6005	D-4	F
FL6006	C-4	F
FL6007	C-4	C
FL6008	D-4	F
FL6009	C-4	F
FL6010	C-4	F
FL6011	C-4	F
FL6012	D-4	F
FL6013	C-4	F
FL6014	D-4	F
FL6015	C-4	F
FL6016	D-4	F
FL6017	B-4	F
FL6018	C-5	C
FL6020	B-4	F
FL6021	D-3	F
FL6022	B-5	C
FL6023	B-6	C

Capacitor

C3401	E-2	F
C3402	E-6	C
C3403	F-6	C
C3404	E-5	C
C3405	E-5	C
C3406	F-6	C
C3407	E-2	F
C3408	E-2	F
C3410	F-6	C
C3411	E-6	C
C3417	F-5	C
C3418	F-5	C
C3419	E-5	C
C3420	E-5	C
C3421	E-5	C
C3422	E-5	C
C3423	E-5	C
C3424	E-5	C
C3425	E-5	C
C3426	E-5	C
C3427	E-5	C
C3428	E-5	C
C3429	E-7	C
C3430	E-6	C
C3431	E-6	C
C3432	E-6	C
C3433	E-6	C
C3435	E-6	C
C3436	E-6	C
C3440	E-7	C
C3441	E-2	F
C3502	C-7	F
C4411	E-6	F
C4412	E-2	C
C4413	E-1	C
C4414	E-6	F
C4415	E-5	F
C4416	D-4	C
C4417	E-6	F
C4418	D-3	C
C4421	E-3	C
C4422	E-1	C
C4423	D-3	C
C4424	F-4	F
C4425	F-6	F
C4426	E-5	F
C4427	E-2	C
C4428	E-6	F
C4429	E-6	F
C4430	E-6	F
C4431	E-6	F
C4432	E-7	F
C4433	E-1	C
C4434	E-7	F
C6001	D-3	F
C6002	D-4	F
C6003	C-3	F
C9001	E-4	C
C9002	E-4	C
C50001	C-3	F
C50002	C-5	C
C50004	C-5	C
C50005	F-5	C

Resistor

R3405	E-5	C
R3407	E-5	C
R3409	E-6	C
R3410	E-6	C
R3411	E-6	C
R3412	E-6	C
R3414	E-2	F
R3416	E-6	C
R3417	E-6	C
R3418	E-6	C
R3419	D-5	C
R3420	D-5	C
R3421	D-5	C
R3422	E-5	C
R3423	E-5	C
R3427	E-5	C
R3430	D-5	C
R3432	E-5	C
R3433	D-4	C
R3434	E-5	C
R3436	E-2	F
R3440	D-4	C
R3442	D-4	C
R3443	D-4	C
R3444	D-4	C
R3445	D-2	F
R3447	E-2	F
R3448	E-2	F
R3449	E-2	F
R3450	E-2	F
R3451	E-2	F
R3452	D-2	F
R3453	D-2	F
R3454	E-2	F
R3455	D-2	F
R3456	D-2	F
R3457	E-2	F
R3458	D-2	F
R3460	D-2	F
R3461	E-2	F
R3462	E-2	F
R3463	D-5	C
R3464	C-5	C
R3472	D-4	C
R3473	D-5	C
R3476	E-5	C
R3501	C-5	F
R3502	C-5	F
R3503	C-5	F
R3509	C-5	F
R3510	D-5	F
R3511	D-5	F
R3514	D-5	F
R3519	D-6	F
R3520	D-6	F
R3521	D-6	F
R3522	D-6	F
R3523	D-6	F
R3524	D-6	F
R3525	D-6	F
R3526	C-6	F
R3527	C-6	F
R3528	C-6	F
R3530	D-6	F
R3531	C-7	F
R3532	D-6	F
R3533	C-7	F
R3535	C-7	F
R3537	C-7	F
R3541	D-6	F
R3542	D-6	F
R3543	D-7	F
R3548	D-6	F
R4418	E-7	F
R4419	E-7	F
R4420	E-7	F
R4421	E-7	F
R4422	E-6	F
R4423	E-7	F
R4424	E-6	F
R4425	E-6	F
R4426	F-2	C
R4427	F-2	C
R4428	E-6	F
R4433	E-5	F
R4434	E-6	F
R4435	E-6	F
R4436	E-6	F
R4437	E-6	F
R4438	D-6	F
R4439	D-6	F
R4450	E-7	F
R4451	E-7	F
R4452	E-6	F
R4453	E-7	F
R4454	D-6	F
R4455	D-6	F
R4456	E-6	F
R4457	E-7	F
R6001	B-1	F
R6002	C-3	F
R6003	C-4	F
R6004	E-4	C
R6005	D-4	C
R6006	D-4	C
R6007	D-4	C
R6008	C-6	C
R6009	C-4	F
R6010	C-4	F
R6011	C-4	C
R6012	B-4	F
R6013	B-4	F
R6014	A-5	F
R6015	A-5	F
R6016	A-5	F
R6017	B-4	F
R6018	B-3	F
R6019	B-3	F
R6020	B-3	F
R6021	B-3	F
R6022	B-3	F
R6023	B-3	F
R6025	D-3	F
R6028	D-3	F
R6029	C-3	F
R6030	D-3	F
R6031	D-3	F
R6035	D-3	F
R6036	D-3	F
R6037	D-3	F
R6039	D-3	F
R6054	D-3	F
R6706	B-3	C
R6707	B-3	C
R6709	A-3	C
R6710	A-3	C
R6711	B-4	C
R6712	B-4	C
R6713	B-4	C
R6714	B-4	C
R6715	B-4	C
R6716	C-3	C
R6717	C-3	C
R6718	B-3	C
R6720	B-3	C
R6721	B-3	C
R6722	B-2	C
R6723	B-2	C
R6724	B-3	C
R6725	B-3	C
R6726	B-3	C
R6727	C-3	C
R6728	B-3	C
R6729	C-2	C
R6730	C-2	C
R6731	C-2	C
R6732	C-2	C
R6733	C-2	C
R6735	C-2	C
R6737	B-1	C
R6738	B-2	C
R6739	B-1	C
R6750	D-3	F
R6751	E-4	C
R6752	D-3	F
R6753	C-2	C
R6754	C-3	C
R50001	D-4	F
R50002	D-4	F
R50003	D-4	F
R50004	D-3	F
R50005	D-3	F
R50006	D-3	F
R50007	D-3	F
R50008	D-3	F
R50009	D-3	F
R50010	C-3	F
R50011	C-3	F
R50012	B-3	F
R50013	D-2	F
R50015	C-5	C
R50016	C-5	C
R50017	C-5	C
R50018	F-4	C
R50019	F-4	C
R50020	F-4	C
R50021	F-4	C
R50022	F-4	C
R50023	F-4	C
R50024	F-4	C
R50025	F-4	C
R50026	F-3	C
R50027	F-4	C
R50028	F-4	C
R50029	F-4	C
R50030	E-4	C
R50031	E-4	C
R50032	F-4	C
R50033	F-4	C
R50034	F-4	C
R50035	F-4	C
R50036	D-3	F
R50037	D-3	F
R50038	D-3	F
R50039	D-3	F
RX3401	E-6	C
RX3402	E-6	C
RX3403	E-6	C
RX3404	D-7	C
RX3405	D-6	C
RX3406	C-7	C
RX3407	C-7	C
RX3408	E-4	C
RX3409	E-6	C
RX3410	E-5	C
RX3411	E-5	C
RX3412	D-6	C
RX3413	C-6	C
RX3414	C-6	C
RX3415	D-6	C
RX3416	D-6	C
RX3417	E-4	C
RX3421	D-4	C
RX3422	E-4	C
RX3433	C-3	C
RX3434	C-3	C
RX3435	C-3	C
RX3436	C-4	C
RX3437	C-4	C
RX3438	C-4	C
RX3439	D-3	C
RX3440	D-3	C
RX3441	D-3	C
RX3442	D-4	C
RX3443	D-4	C
RX3444	D-4	C
RX3501	C-6	F
RX3502	C-6	F
RX3503	C-5	F
RX3504	C-5	F
RX3505	C-5	F
RX3506	C-5	F
RX3507	C-5	F
RX3508	C-5	F
RX3514	D-6	F
RX3515	D-6	F
RX3516	D-6	F
RX3517	C-6	F
RX3518	D-6	F
RX3519	D-6	F
RX3520	C-6	F
RX3521	C-6	F
RX3522	C-6	F
RX3523	D-7	F
RX3524	D-7	F
RX3525	D-7	F
RX3526	D-7	F
RX3527	C-7	F
RX3528	C-7	F
RX3529	E-7	F
RX3530	D-7	F
RX3531	D-7	F
RX3532	D-7	F
RX3538	C-5	F
RX3539	C-6	F
RX3540	C-6	F
RX6001	B-4	F
RX6002	B-4	C
RX6003	C-4	C
RX6004	B-5	C
RX6005	D-3	F
RX6006	D-3	F
RX6007	C-5	C
RX6009	D-4	F
RX6010	D-5	F
RX6011	C-4	F
RX6012	C-4	F
RX6013	C-4	F
RX6014	C-4	F
RX6015	C-4	F
RX6016	C-4	F
RX6017	C-4	F
RX6018	C-4	F
RX6019	B-4	F
RX6020	B-4	F
RX6021	B-4	F
RX6022	B-4	F
RX6023	C-4	F
RX6024	C-4	F
RX6025	C-4	F
RX6026	C-4	F
RX6027	B-4	F
RX6028	B-4	F
RX6029	B-4	F
RX6030	B-4	F
RX6031	B-3	F
RX6032	B-3	F
RX6033	B-3	F
RX6034	B-3	F
RX6035	D-3	F
RX6036	D-3	F
RX6037	C-4	F
RX6038	D-4	F
RX6039	B-5	C
RX6040	B-5	C
RX6041	B-6	C
RX6042	B-6	C
RX6043	D-3	F
RX6044	D-2	F
RX6701	B-3	C
RX6702	A-3	C
RX6703	C-3	C
RX6704	B-3	C
RX6705	A-3	C
RX6706	B-3	C
RX6708	B-4	C
RX6711	B-3	C
RX6712	A-4	C
RX6713	B-4	C
RX6716	B-4	C
RX6717	B-4	C
RX6718	B-4	C
RX6719	C-4	C
RX6720	C-3	C
RX6721	C-3	C
RX6722	C-3	C
RX6723	C-3	C
RX6724	C-3	C
RX6726	C-4	C
RX6727	C-4	C
RX6728	B-4	C
RX6729	B-2	C
RX6730	B-2	C
RX6731	B-2	C
RX6732	B-2	C
RX6733	B-2	C
RX6734	C-3	C
RX6735	C-3	C
RX6736	B-2	C
RX6737	B-2	C
RX6738	C-4	C
RX50001	E-4	F
RX50002	E-4	F
RX50003	D-4	F
RX50004	D-4	F
RX50005	D-3	F
RX50006	D-3	F
RX50007	E-2	F
RX50008	E-2	F
RX50009	D-4	F
RX50010	D-4	F
RX50011	D-4	F
RX50012	D-4	F
RX50013	D-4	F
RX50014	D-3	F
RX50015	D-3	F
RX50016	D-3	F

ADDRESS INFORMATION
C……COMPONENT SIDE
F……FOIL SIDE

GN:Glue Net Section(Page: F)
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TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)

DMR-E85HP/PC AV Encoder Section(Digital P.C.B.(2/5)) Schematic Diagram(EN)

IC3404
MN85573
(AVENC)

DMR-E85HP/PC AV Encoder Section(Digital P.C.B.(2/5)) Schematic Diagram(EN)

DMR-E85HP/PC AV Encoder Section(Digital P.C.B.(2/5)) Schematic Diagram(EN)

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D3.3V

RX3421 22X4 (D4 D6 D5 D7) — ED7 ED6 ED5 ED4
RX3422 22X4 (D8 D10 D9 D11) — ED3 ED2 ED1 ED0
R3432 22, R3433 22, R3434 22 (D1 D3 D2) — CDACK CDREADY RCLKI
RX3410 22X4 (C1 C3 C2 C4) — R656ENC7 R656ENC6 R656ENC5 R656ENC4
RX3411 22X4 (C5 C7 C6 C8) — R656ENC3 R656ENC2 R656ENC1 R656ENC0

R656ENC7 R656ENC6 R656ENC5 R656ENC4 R656ENC3 R656ENC2 R656ENC1 R656ENC0 (MC)
CDACK RCLKI CDREADY (TR)
ED7 ED6 ED5 ED4 ED3 ED2 ED1 ED0 (TR)
XMRE XMWE3 XVDSPCS XVDSPDK XIRQ6 XRTSCINT (MC)
MSD31 MSD30 MSD29 MSD28 MSD27 MSD26 MSD25 MSD24 MSD23 MSD22 MSD21 MSD20 MSD19 MSD18 MSD17 MSD16 (GN)
SA12 SA11 SA10 SA9 SA8 SA7 SA6 SA5 MSA4 MSA3 MSA2 MSA1 (MC)

RX3439 22X4 (MDQA15 MDQA14 MDQA13 MDQA12) — MDQA0 MDQA1 MDQA2 MDQA3
RX3440 22X4 (MDQA11 MDQA10 MDQA9 MDQA8) — MDQA4 MDQA5 MDQA6 MDQA7
RX3441 22X4 (MAA9 MAA8 MAA7 MAA6)
RX3442 22X4 (MAA5 MAA4 MAA3)
RX3443 22X4 (MDQA31 MDQA30 MDQA29 MDQA28) — MDQA16 MDQA17 MDQA18 MDQA19
RX3444 22X4 (MDQA27 MDQA26 MDQA25 MDQA24) — MDQA20 MDQA21 MDQA22 MDQA23
RX3433 22X4 (DQ0 DQ1 DQ2 DQ3)
RX3434 22X4 (DQ4 DQ5 DQ6 DQ7)
RX3435 22X4 (DQM0 WE CAS RAS CS)
RX3436 22X4 (BA0 BA1 A10 A0 A1 A2)
RX3437 22X4 (DQM2 DQ16 DQ17 DQ18 DQ19)
RX3438 22X4 (DQ20 DQ21 DQ22 DQ23)
R3472 22, R3473 22 — MAA10 MAA0 MAA1 MAA2

LB3409 J0JHC0000032, FL3435 F1H0J4740004
LB3408 J0JHC0000032, FL3434 F1H0J4740004

IC3408
C3ABPJ000048
(32bit/64M SDRAM)

VSS DQ15 VSSQ DQ14 DQ13 VCCQ DQ12 DQ11 VSSQ DQ10 DQ9 VCCQ DQ8 NC VSS DQM1 NC NC CLK CKE A9 A8 A7 A6 A5 A4 A3 DQM3 VSS NC DQ31 VCCQ DQ30 DQ29 VSSQ DQ28 DQ27 VCCQ DQ26 DQ25 VSSQ DQ24 VSS
VCC DQ0 VCCQ DQ1 DQ2 VSSQ DQ3 DQ4 VCCQ DQ5 DQ6 VSSQ DQ7 NC VCC DQM0 WE CAS RAS CS NC BA0 BA1 A10 A0 A1 A2 DQM2 VCC NC DQ16 VSSQ DQ17 DQ18 VCCQ DQ19 DQ20 VSSQ DQ21 DQ22 VCCQ DQ23 VCC

I10 I11 I8 I9 I14 I15 I12 I13 I7

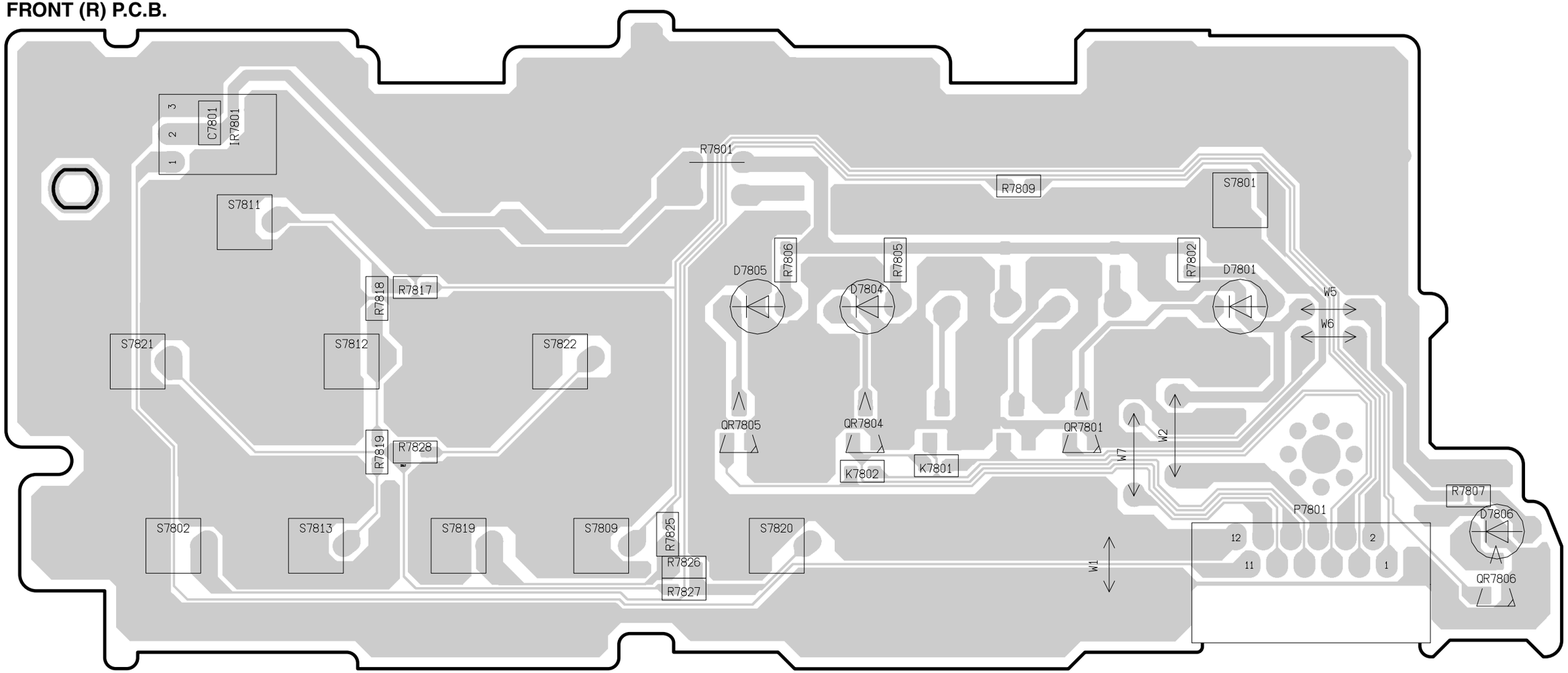
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
AV Encoder Section(Digital P.C.B.(2/5))
Schematic Diagram(EN)

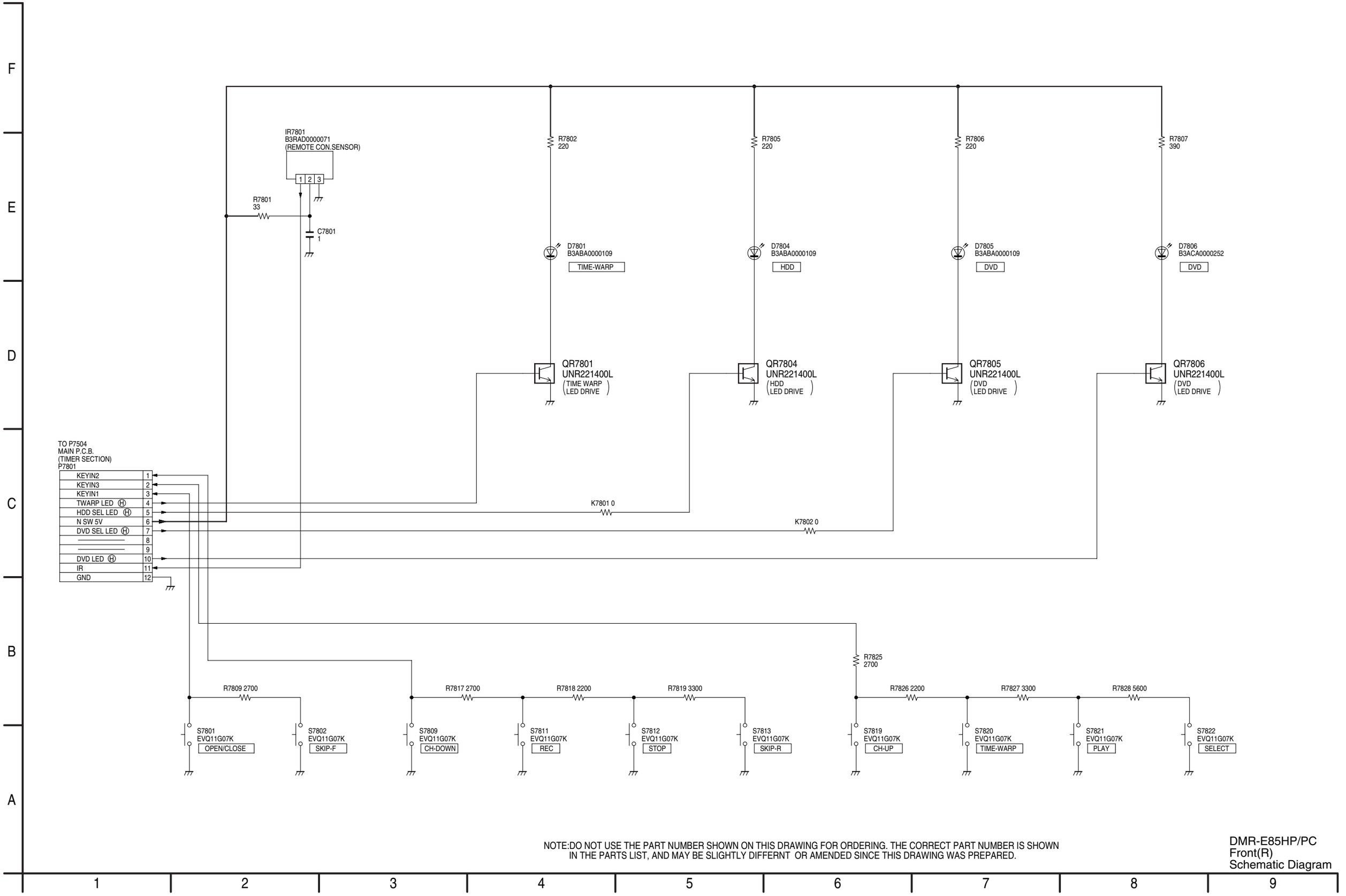
DMR-E85HP/PC AV Encoder Section(Digital P.C.B.(2/5)) Schematic Diagram(EN)

26 27 28 29 30 31 32 33 34 35 36 37

FRONT (R) P.C.B.



DMR-E85HP/PC
FRONT (R) P.C.B.
(REP3713B)



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DMR-E85HP/PC
Front(R)
Schematic Diagram

Ref No.	QR7801			QR7804			QR7805			QR7806		
MODE	E	C	B	E	C	B	E	C	B	E	C	B
REC	0	3.5	0	0	3.5	0	0	0.1	4.9	0	0	4.9
PLAY	0	3.5	0	0	3.5	0	0	0.1	4.9	0	0	4.9
STOP	0	3.5	0	0	3.5	0	0	0.1	4.9	0	0	4.9

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IC6701
C1ZBZ0002433
(GLUE)

Q6701
B1ABCF000114
(BUFFER)

DMR-E85HP/PC
Glue Net Section(Digital P.C.B.(1/5))
Schematic Diagram(GN)

GN:Glue Net Section(Page: F)
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D5V
R6733 10K
RX6736 10Kx4
R6735 4700
RX6737 4.7Kx4
Q6705 B1ABCF000114 (BUFFER) — SCLK
Q6704 B1ABCF000114 (BUFFER) — XINTP
Q6703 B1ABCF000114 (BUFFER) — SBPTM
Q6702 B1ABCF000114 (BUFFER) — UARTP2G

IC6703
E85HP:REP3774G
E85HPC: RFKBE85HPC
(DATA STRAGE)
NC, XSE, RXB, XREF, XCE, VCC, VSS, CLE, ALE, XWEF, XWP
D7 D6 D5 D4 D3 D2 D1 D0 → DE7 DE6 DE5 DE4 DE3 DE2 DE1 DE0

D3.3V
R6739 1K
R6737 47
R6738 47
FL6702 EHJH0J400004
R6703 10K
XCE
CLE
ALE
XWP

A1 A2 A3 A4 A5
I2C5DT
I2C5CK
SCURVE1
SCURVE0
XINTM
XINTP
XFWE
SCLK
XMPREQ
SBMTP
SBPTM
ITM2A
ITA2M
UARTP2G
UARTG2P
LB9001 J0JHC0000032
LB9002 J0JHC0000032
C9001 47P
C9002 47P
LB9009 J0JHC0000046
CKJ69
CKJ75
CKJ79
CKJ83

B1 B2 B3 B4 B5 B6 B7 B9 B10 B11 B12 B13 B14
R6751 47
R6750 47
R6752 100
CKJ58
CKJ62
CKJ65
CKJ72
CKJ70

CK.110 CK.108 CK.115 CK.150 CK.148 CK.147 CK.145 CK.142 CK.139 CK.137 CK.135 CK.134 CK.133 CK.131 CK.130 CK.129 CK.127 CK.126 CK.125 CK.123 CK.122 CK.121 CK.119 CK.118 CK.113 CK.39 CK.36 CK.35 CK.42 CK.31

TO P7402
MAIN P.C.B.
(MAIN NET)
P9001

1	CPNCIN DM
2	V YIN DM
3	DGND
4	DGND
5	G CY IN
6	RGB CPSVIN
7	DGND
8	DGND
9	B/CB IN
10	EPG ON (H)
11	DGND
12	DGND
13	R/CR IN
14	DGND
15	
16	DGND
17	
18	COUT DM
19	I2C5DT
20	DGND
21	I2C5CK
22	YOUT DM
23	SCURVE1
24	DGND
25	SCURVE0
26	GPYOUT DM
27	XINTM
28	DGND
29	XINTP
30	BPBOUT DM
31	XFWE
32	DGND
33	SCLK
34	RPROUT DM
35	XMPREQ
36	DGND
37	SBMTP
38	CSYNC IN
39	SBPTM
40	DGND
41	
42	PRGSEL
43	
44	DGND
45	ITM2A
46	DGND
47	ITA2M
48	AADC R
49	
50	AADC L
51	
52	AUGND
53	
54	AUGND
55	
56	AUGND
57	DGND
58	MIXROUT DM
59	DGND
60	AUGND
61	DGND
62	MIXLOUT DM
63	DGND
64	AUGND
65	UARTP2G
66	
67	DGND
68	AU 5V
69	UARTG2P
70	XDMUTE
71	
72	IECOUT
73	
74	D 3.3V
75	ANA 3.3V
76	D 3.3V
77	GND
78	D 1.5V
79	ANA 5V
80	D 1.5V
81	
82	D 1.2V
83	D 5V
84	D 1.5V
85	
86	D 1.2V
87	
88	D 1.2V

F
XGINT1 (MC)
XGINT2 (MC)
XDK (MC)
XFROMCS (MC)
UARTG2M (MC)
UARTM2G (MC)

XTRINT (TR)
XTRDK (TR)
XTRCS (TR)
XRTSCINT (EN)
XVDSPDK (EN)
XSPTDK (MC)
XVDSPCS (EN)
MSD16 (EN)(TR)
MSD17 (EN)(TR)
MSD18 (EN)(TR)
MSD19 (EN)(TR)
MSD20 (EN)(TR)
MSD21 (EN)(TR)
MSD22 (EN)(TR)
MSD23 (EN)(TR)
MSD24 (EN)(TR)
MSD25 (EN)(TR)
MSD26 (EN)(TR)
MSD27 (EN)(TR)
MSD28 (EN)(TR)
MSD29 (EN)(TR)
MSD30 (EN)(TR)
MSD31 (EN)(TR)

B1 V YIN DM (EN)
B2 RGB CPSVIN (EN)
B3 COUT DM (MC)
B4 YOUT DM (MC)
B5 GPYOUT DM (MC)
B6 BPBOUT DM (MC)
B7 RPROUT DM (MC)
B9 PRGSEL (MC)
B10 AADC R (AI)
B11 AADC L (AI)
AUGND (AI)
LB9006 J0JCC0000103
B12 MIXROUT DM (AI)
LB9007 J0JCC0000103
B13 MIXLOUT DM (AI)
B14 XDMUTE (AI)
DGND (AI)(EN)(MC)(TR)

CKJ68
LB9008 J0JHC0000045
AU 5V (AI)
CKJ74
D3.3V (AI)(MC)(EN)(TR)
CKJ78
D1.5V (EN)(TR)
CKJ82
D1.2V (MC)

D3.3V
ANA3.3V
ANA5V
D5V

DMR-E85HP/PC
Glue Net Section(Digital P.C.B.(1/5))
Schematic Diagram(GN)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E85HP/PC
Glue Net Section(Digital P.C.B.(1/5))
Schematic Diagram(GN)

13 14 15 16 17 18 19 20 21 22 23 24 25

TU7401
U/V TUNER

1	AGC
2	TU
3	-
4	SCL
5	SDA
6	-
7	REG 5V
8	-
9	BTL
10	-
11	IF OUT
12	IF IN
13	REG 5V
14	-
15	GND
16	AFT
17	AGC OUT
18	VIDEO OUT
19	-
20	GND
21	SCL
22	SDA
23	-
24	-
25	-
26	R OUT
27	L OUT

P7402 — P9001

CPNCIN DM	1	1	CPNCIN DM
V YIN DM	2	2	V YIN DM
DGND	3	3	DGND
DGND	4	4	DGND
G/CY IN	5	5	G/CY IN
RGB CPSVIN	6	6	RGB CPSVIN
DGND	7	7	DGND
DGND	8	8	DGND
B/CB IN	9	9	B/CB IN
EPG ON (H)	10	10	EPG ON (H)
DGND	11	11	DGND
DGND	12	12	DGND
R/CR IN	13	13	R/CR IN
DGND	14	14	DGND
	15	15	
DGND	16	16	DGND
	17	17	
COUT DM	18	18	COUT DM
I2CSDT	19	19	I2CSDT
DGND	20	20	DGND
I2CSCK	21	21	I2CSCK
YOUT DM	22	22	YOUT DM
SCURVE1	23	23	SCURVE1
DGND	24	24	DGND
SCURVE0	25	25	SCURVE0
GPYOUT DM	26	26	GPYOUT DM
XINTM	27	27	XINTM
DGND	28	28	DGND
XINTP	29	29	XINTP
BPBOUT DM	30	30	BPBOUT DM
	31	31	XFWE
DGND	32	32	DGND
SCLK	33	33	SCLK
RPROUT DM	34	34	RPROUT DM
XMPREQ	35	35	XMPREQ
DGND	36	36	DGND
SBMTP	37	37	SBMTP
CSYNC IN	38	38	CSYNC IN
SBPTM	39	39	SBPTM
DGND	40	40	DGND
	41	41	
PRGSEL	42	42	PRGSEL
	43	43	
DGND	44	44	DGND
ITA2M	45	45	ITA2M
DGND	46	46	DGND
ITM2A	47	47	ITM2A
AADC R	48	48	AADC R
	49	49	
AADC L	50	50	AADC L
	51	51	
AUGND	52	52	AUGND
	53	53	
AUGND	54	54	AUGND
	55	55	
AUGND	56	56	AUGND
DGND	57	57	DGND
MIXROUT DM	58	58	MIXROUT DM
DGND	59	59	DGND
AUGND	60	60	AUGND
DGND	61	61	DGND
MIXLOUT DM	62	62	MIXLOUT DM
DGND	63	63	DGND
AUGND	64	64	AUGND
UARTP2G	65	65	UARTP2G
	66	66	
DGND	67	67	DGND
AU5V	68	68	AU5V
UARTG2P	69	69	UARTG2P
XDMUTE	70	70	XDMUTE
	71	71	NET 4.4V
IECOUT	72	72	IECOUT
	73	73	NET 4.4V
D3.3V	74	74	D3.3V
ANA3.3V	75	75	ANA3.3V
D3.3V	76	76	D3.3V
GND	77	77	GND
D1.5V	78	78	D1.5V
ANA5V	79	79	ANA5V
D1.5V	80	80	D1.5V
	81	81	
D1.2V	82	82	D1.2V
D5V	83	83	D5V
D1.5V	84	84	D1.5V
	85	85	
D1.2V	86	86	D1.2V
	87	87	
D1.2V	88	88	D1.2V

DIGITAL P.C.B.

P.C.B.Name	Circuit Name	Ref.No.
Digital P.C.B.	AV ENC	Ref.No.3400 SERIES
	RTSC	Ref.No.3500 SERIES
	AVDEC/MAIN CPU	Ref.No.6000,50000 SERIES
	Audio I/O	Ref.No.4400 SERIES
	Glue Net	Ref.No.6700,9000 SERIES

FP3501

RESET-	40
GND	39
DD7	38
DD8	37
DD6	36
DD9	35
DD5	34
DD10	33
DD4	32
DD11	31
DD3	30
DD12	29
DD2	28
DD13	27
DD1	26
DD14	25
DD0	24
DD15	23
GND	22
	21
DMARQ	20
GND	19
DIOW-	18
GND	17
DIOR-	16
GND	15
IORDY	14
CSEL	13
DMACK-	12
GND	11
INTRQ	10
	9
DA1	8
	7
DA0	6
DA2	5
CS0-	4
CS1-	3
	2
GND	1

FP601

1	RESET-	
2	GND	
3	DD7	
4	DD8	
5	DD6	
6	DD9	
7	DD5	
8	DD10	
9	DD4	
10	DD11	
11	DD3	
12	DD12	
13	DD2	
14	DD13	
15	DD1	
16	DD14	
17	DD0	
18	DD15	
19	GND	
20		
21	DMARQ	
22	GND	
23	DIOW-	
24	GND	
25	NIOR-	
26	GND	
27	IORDY	
28	CSEL	
29	DMACK-	
30	GND	
31	INTRQ	
32	IOCS16-	
33	DA1	
34	PD1AG-	
35	DA0	
36	DA2	
37	CS0-	
38	CS1-	
39	DASP-	
40	GND	

FP602

GND	40
DASP-	39
CS1-	38
CS0-	37
DA2	36
DA0	35
PDIAG-	34
DA1	33
IOCS16-	32
INTRQ	31
GND	30
DMACK-	29
CSEL	28
IORDY	27
GND	26
NIOR-	25
GND	24
DIOW-	23
GND	22
DMARQ	21
KEY	20
GND	19
DD15	18
DD0	17
DD14	16
DD1	15
DD13	14
DD2	13
DD12	12
DD3	11
DD11	10
DD4	9
DD10	8
DD5	7
DD9	6
DD6	5
DD8	4
DD7	3
GND	2
RESET-	1

(TO HDD DRIVE)

DVD RAM DRIVE
(DRIVE P.C.B.)

P102 — P1501

+12V	1	1	DR12V
GND	2	2	GND
M GND	3	3	GND
+5V	4	4	DR5V
+5V	5	5	DR5V
M GND	6	6	GND
GND	7	7	GND
+12V	8	8	DR12V

P8001 — PP7401

ITA2M	8	8	ITA2M
ITM2A	7	7	ITM2A
BUSY	6	6	BUSY
FL CLK	5	5	FL CLK
FL DATA	4	4	FL DATA
XIR CS	3	3	XIR CS
GND	2	2	GND
D5V	1	1	D5V

IR P.C.B.

P.C.B.Name	Circuit Name	Ref.No.
Main P.C.B.	Main Net	Ref.No.7400 SERIES
	Sub Power Supply	Ref.No.1500 SERIES
	Video I/O	Ref.No.3000 SERIES
	Audio Main	Ref.No.4000 SERIES
	Timer	Ref.No.7500,7600 SERIES

MAIN P.C.B.

P7503

FANDCOUT	1
GND	2
FANLOCK	3

FAN MOTOR

P7504 — P7801

KEY IN2	1	1	KEY IN2
KEY IN3	2	2	KEY IN3
KEY IN1	3	3	KEY IN1
TIME WARP LED (H)	4	4	TIME WARP LED (H)
HDD SEL LED (H)	5	5	HDD SEL LED (H)
N SW 5V	6	6	N SW 5V
DVD SEL LED (H)	7	7	DVD SEL LED (H)
	8	8	
	9	9	
DVD LED (H)	10	10	DVD LED (H)
IR	11	11	IR
GND	12	12	GND

FRONT(R) P.C.B.

P1101 (N A)

P1502 — P1102

	1	1	
X SW13V	2	2	X SW13V
X SW5.8V	3	3	X SW5.8V
X SW5.8V	4	4	X SW5.8V
GND	5	5	GND
GND	6	6	GND
GND	7	7	GND
GND	8	8	GND
GND	9	9	GND
DR P ON (H)	10	10	DR P ON (H)
	11	11	
DR12V	12	12	DR12V
DR12V	13	13	DR12V
DR GND	14	14	DR GND
DR GND	15	15	DR GND
DR5V	16	16	DR5V
DR5V	17	17	DR5V
POWER ON (H)	18	18	POWER ON (H)
D 3.3V	19	19	D 3.3V
D 3.3V	20	20	D 3.3V
D 1.8V	21	21	D 1.8V
D 1.8V	22	22	D 1.8V
HDD PFAIL	23	23	HDD PFAIL

POWER P.C.B.

DR12V	1
GND	2
GND	3
DR5V	4

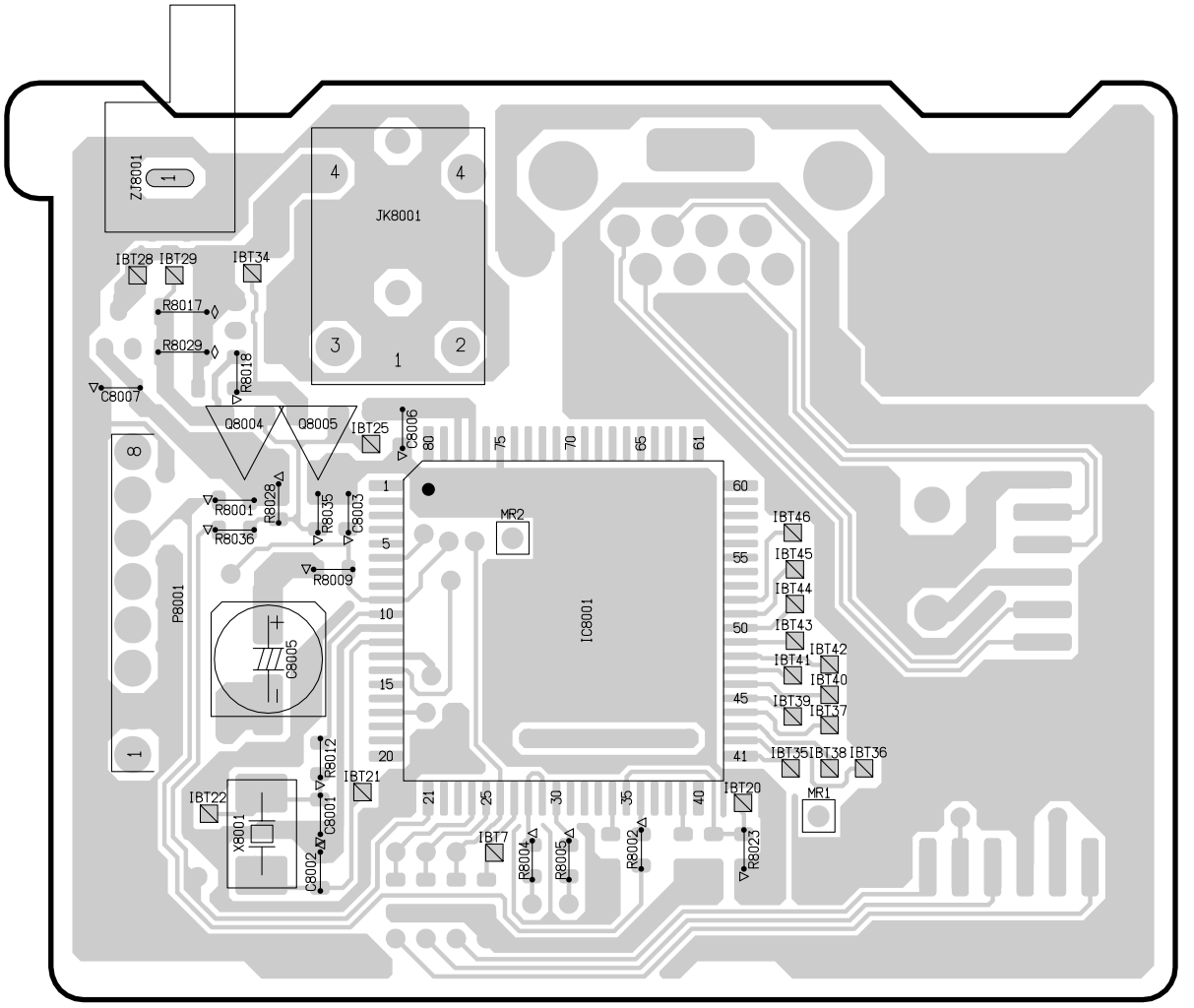
HDD DRIVE

1	GND
2	[DASP-NC]
3	DA1-
4	DA0-
5	DA2
6	DA0
7	PDIAG-[C]
8	DA1
9	[RESERVED]
10	INTRQ
11	GND
12	DMACK-
13	GND
14	IORDY
15	GND
16	DIOR-
17	GND
18	DIOW-
19	GND
20	DMARQ
21	[KEY PIN]
22	GND
23	DD15
24	DD0
25	DD14
26	DD1
27	DD13
28	DD2
29	DD12
30	DD3
31	DD11
32	DD4
33	DD10
34	DD5
35	DD9
36	DD6
37	DD8
38	DD7
39	GND
40	RESET-

5V	1
GND	2
GND	3
12V	4

DMR-E85HP/PC
Interconnection
Schematic Diagram

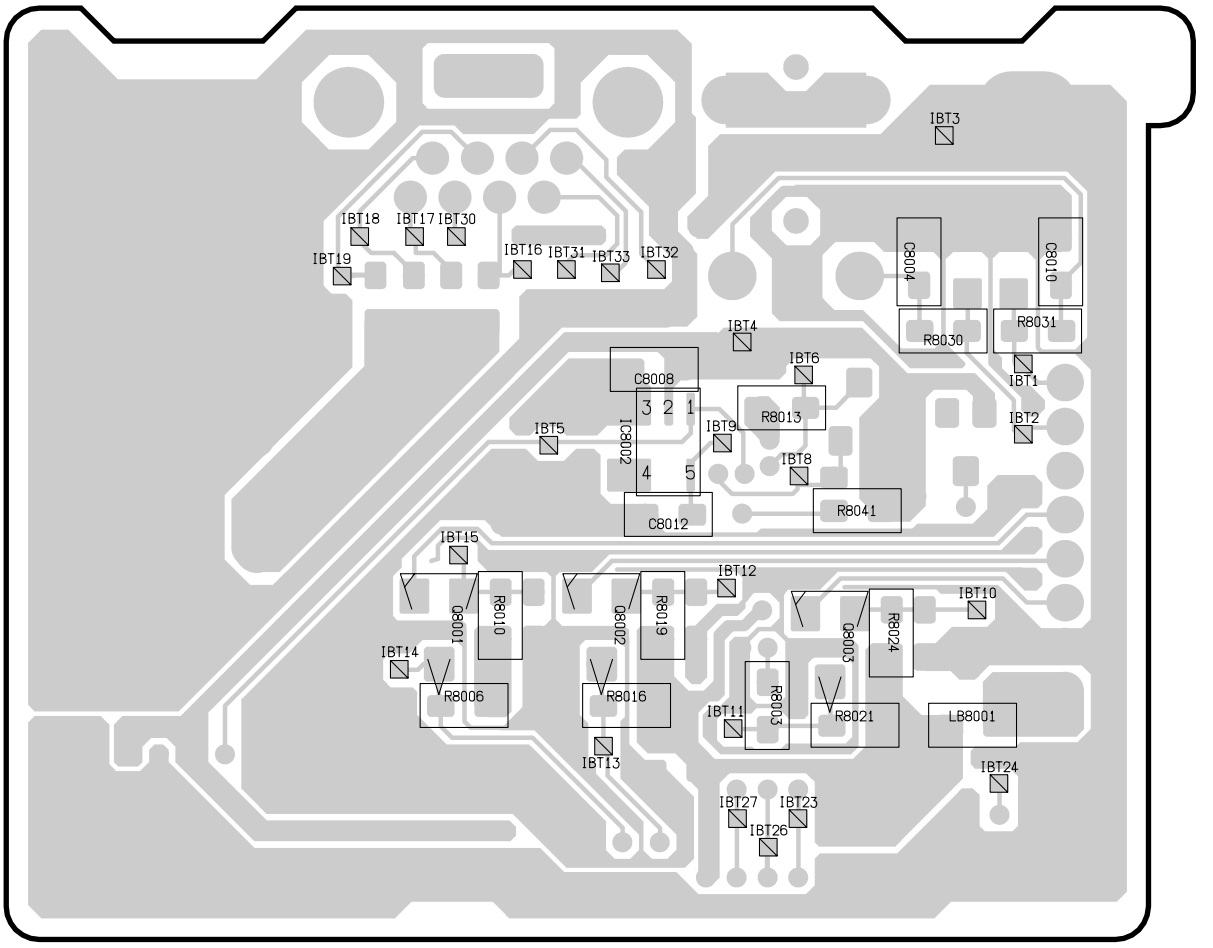
IR P.C.B.



(COMPONENT SIDE)

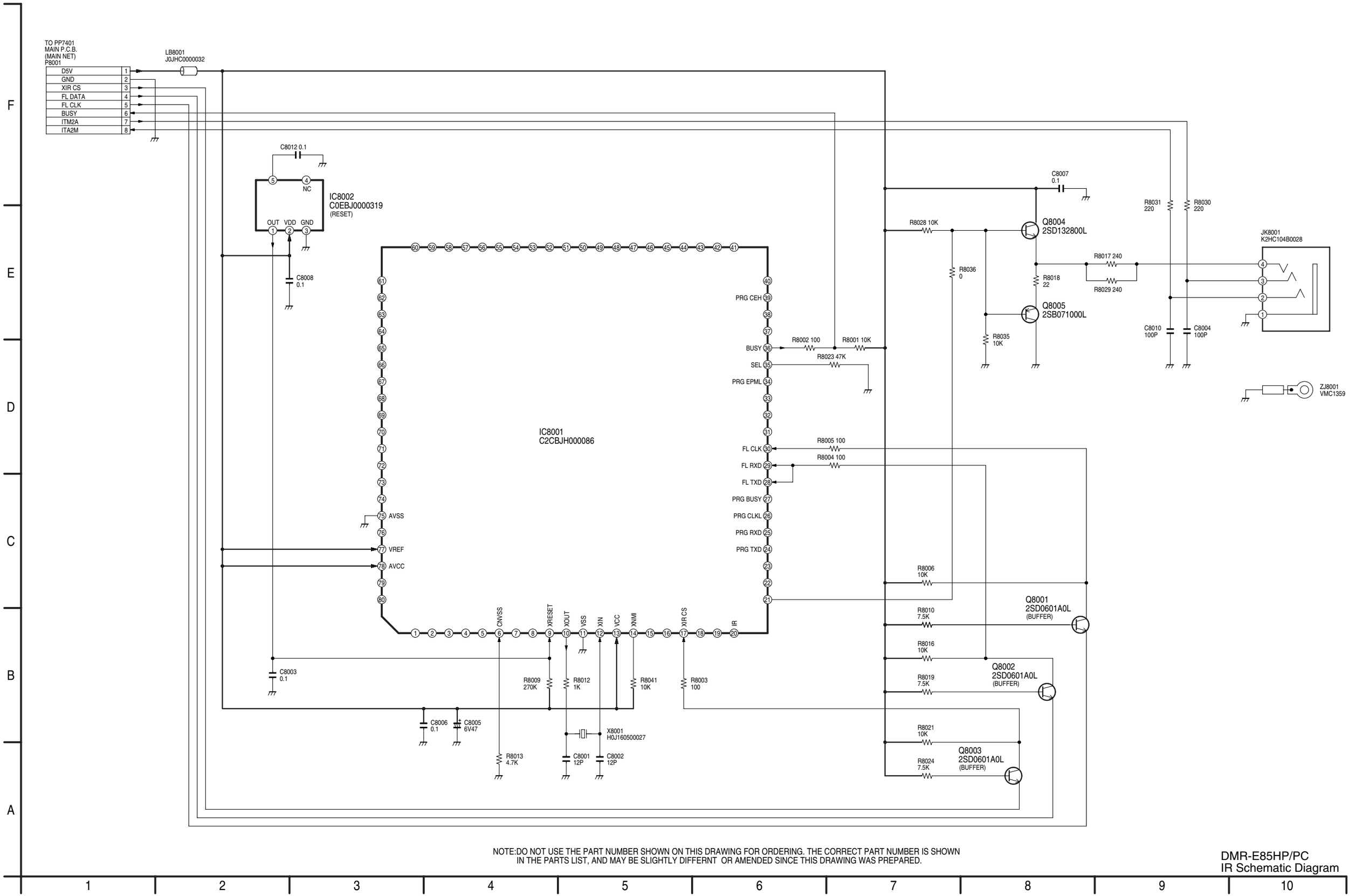
DMR-E85HP/PC
IR P.C.B. (Component Side)
(REP3763A)

IR P.C.B.



(FOIL SIDE)

DMR-E85HP/PC
IR P.C.B. (Foil Side)
(REP3763A)



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DMR-E85HP/PC
IR Schematic Diagram